OPERATING MANUAL

EXSM 6135c
Clarus Control

Operating manual

EXSM 6135c

Clarus Control

WARNING: ALL OPERATING AND MAINTENANCE PROCEDURES SHOWN ON THE NEXT PAGE OF THIS MANUAL MUST BE FOLLOWED DAILY FOR PROPER OPERATION OF YOUR WASCOMAT MACHINE.

PLEASE ENTER THE FOLLOWING INFORMATION AS IT APPEARS ON THE MACHINE(S) DATA PLATE(S).

MACHINE TYPE OR MODEL	
MACHINE SERIAL NUMBER(S)	
ELECTRICAL CHARACTERISTICS: _____ VOLTS, _____ PHASE, _____ HZ.	

MAKE CERTAIN TO KEEP THIS MANUAL IN A SECURE PLACE FOR FUTURE REFERENCE.

c **ETL** us
LISTED

Intentionally blank

SAFETY AND WARNINGS SIGNS

Replace If Missing Or Illegible

One or more of these signs must be affixed on each machine as indicated, when not included as part of the front instruction panel.

LOCATED ON THE OPERATING INSTRUCTION SIGN OF THE MACHINE:

CAUTION

1. Do not open washer door until cycle is completed, operating light is off, and wash cylinder has stopped rotating.
2. Do not tamper with the door safety switch or door lock.
3. Do not attempt to open door or place hands into washer to remove or add clothes during operation. This can cause serious injury.

MACHINE MUST NOT BE USED BY CHILDREN

PRECAUCION

1. No abra la puerta de la máquina lavadora sino hasta que la máquina haya terminado su ciclo, la luz operativa esté apagada y el cilindro de lavado haya completamento terminado de girar.
2. No interfería o manipule el switch o la cerradura de la puerta.
3. No trate de abrir la puerta o meta las manos dentro de la máquina para meter o sacar ropa mientras la máquina está en operación, pues puede resultar seriamento herido.

LAS MÁQUINAS NO DEBEN SER USADAS POR NIÑOS

LOCATED AT THE REAR OF THE MACHINE:

INSTALLATION AND
MAINTENANCE WARNINGS – *AVERTISSEMENT*

1. This machine MUST be securely bolted according to the installation instructions, to reduce the risk of fire and to prevent serious injury, or damage to the machine.
   Pour reduire les risques d'incendie, fixer cet appareil sur un plancher beton sans revetement.
2. If installed on a floor of combustible material, the floor area below this machine must be covered by a metal sheet extending to the outer edges of the machine.
3. This machine MUST be connected to a dedicated electrical circuit to which no other lightning unit or general purpose receptacle is connected. Use copper conductor only.
   Utiliser seulement des conducteurs en cuivre.
4. This machine MUST be serviced and operated in compliance with manufacturer's instructions. CHECK DOOR LOCK EVERY DAY FOR PROPER OPERATION TO PREVENT INJURY OR DAMAGE. IF THE DOOR LOCK FAILS TO OPERATE PROPERLY, PLACE THE MACHINE OUT OF ORDER UNTIL THE PROBLEM IS CORRECTED.
5. Disconnect power prior to servicing of machine.
   Deconnecter cet appareil del'alimentation avant de proceder a l'entretien.
6. To remove top panel, first remove screws at the rear. When remounting the top, reinstall them. To remove the top panel on models on which it is secured by one or two keylocks, use the keys provided in the drum package. Be certain to relock after remounting the top panel.

MANUFACTURED BY WASCATOR
DISTRIBUTED BY WASCOMAT, INWOOD, NEW YORK, USA

471 766202-04

LOCATED ON THE DOOR:

If you need to order more safety or warning signs, call Wascomat's parts department at 516-371-2000, or call your local dealer.
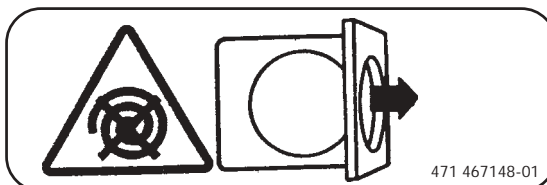
471 467148-01

NOTICE TO: OWNERS, OPERATORS AND DEALERS OF WASCOMAT MACHINES

IMPROPER INSTALLATION AND INADEQUATE MAINTENANCE, POOR HOUSEKEEPING AND WILLFUL NEGLECT OR BYPASSING OF SAFETY DEVICES MAY RESULT IN SERIOUS ACCIDENTS OR INJURY. TO ASSURE THE SAFETY OF CUSTOMERS AND/OR OPERATORS OF YOUR MACHINE, THE FOLLOWING MAINTENANCE CHECKS MUST BE PERFORMED ON A DAILY BASIS.

1. Prior to operation of the machine, check to make certain that all operating instructions and warning signs are affixed to the machine and legible. (See the following page of this manual for description and location of the signs.) Missing or illegible ones must be replaced immediately. Be sure you have spare signs and labels available at all times. These can be obtained from your dealer or Wascomat.

2. Check the door safety interlock, as follows:

    (a) OPEN THE DOOR of the machine and attempt to start in the normal manner:

         For CLARUS microprocessor models, choose a program and press the START button.

THE MACHINE(S) MUST NOT START !

    (b) CLOSE THE DOOR to start machine operation and, while it is operating, attempt to open the door without exerting extreme force on the door handle. The door should remain locked!

         If the machine can start with the door open, or can continue to operate with the door unlocked, the door interlock is no longer operating properly. The machine must be placed out of order and the interlock immediately repaired or replaced. (See the door interlock section of the manual.)

3. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO BYPASS OR REWIRE ANY OF THE MACHINE'S SAFETY DEVICES, AS THIS CAN RESULT IN SERIOUS ACCIDENTS.

4. **Be sure to keep the machine(s) in proper working order**: Follow **all** maintenance and safety procedures. Further information regarding machine safety, service and parts can be obtained from your dealer or from Wascomat through its Technical Support Department - 516/371-0700.

All requests for assistance must include the model, serial number and electrical characteristics as they appear on the machine identification plate. Insert this information in the space provided on the previous page of this manual.

5. **WARNING**: DO NOT OPERATE MACHINE(S) WITH SAFETY DEVICES BYPASSED, REWIRED OR INOPERATIVE! DO NOT OPEN MACHINE DOOR UNTIL DRUM HAS STOPPED ROTATING!

NOTICE TO INSTALLER

Improper installation of this machine:

- May cause serious damage to the machine.
- May result in other property damage.
- May cause personal injury.
- Will void the manufacturer's warranty.

Improper fastening of this machine to its foundation, inferior foundation materials, an undersized foundation, the use of fabricated steel bases not provided by Wascomat or its approved supplier(s), the use of an improper type, number, or size of mounting bolts, or failure to use proper hardware on mounting bolts may result in damage to the machine that will not be covered by the manufacturer's warranty.

Use of a steel base beneath this machine DRAMATICALLY INCREASES the mechanical stress placed on the underlying concrete floor or foundation. This must be taken into consideration when employing a steel base to raise the height of the machine.

Increase the manufacturer's recommended floor or foundation thickness requirements by <u>at least</u> three inches (see installation manual) when using six-inch-high Wascomat steel bases to raise the machine's height.

The use of steel bases more than six inches in height is NOT recommended. If installation requires a base higher than six inches, contact Wascomat Technical Support at 516-371-0700 for advice.

Connection to line Voltage or over-current protection devices other than those specified on the data plate may result in severe damage to machine components, and will void the manufacturer's warranty.

Refer to complete installation instructions provided in manuals accompanying the machine.

Contact Wascomat Technical Support at 516-371-0700 with any questions BEFORE installing this machine. Damage resulting from inadequate installation materials or improper installation techniques will void the manufacturer's warranty.

Intentionally blank

Contents

Intentionally blank

Safety

This machine can only be used with water. Never use dry cleaning agents.

Do not allow children to operate the machine.

Do not hose down or spray the machine with water.

Mechanical and electrical installation must be carried out by qualified personnel.

The machine's door lock must not be bypassed and it should be checked daily to ensure it functions.

Should the machine malfunction, turn off electrical power, mark the machine "out of order", and contact your local authorized Wascomat dealer.

2070

2071
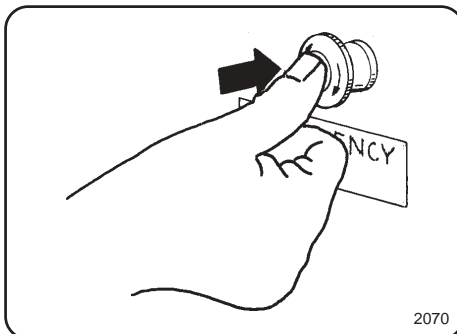
Emergency stop
Some models are equipped with an emergency stop button. Press it to turn off power to the drive motor and control circuits. Note that this switch DOES NOT completely disconnect power from the washer, and that some circuits may still be energized. Use appropriate caution.
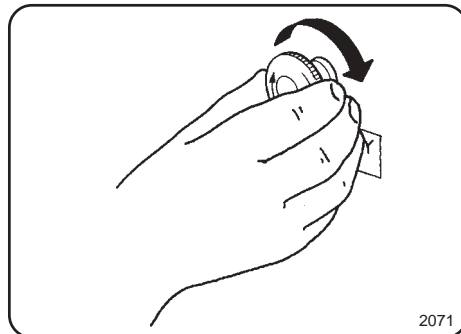
When necessary measures have been taken, the emergency button can be reset by turning the button clockwise until it is released.

The manufacturer reserves the right to make changes to design and component specifications.

Intentionally blank

Use the library to select from a list of stored wash programs

This is your starting point when you wish to run a wash program

Here you can see how the machine can be controlled when a wash program is not running

Preparations

Select manual operation

Start a wash program from the program library

Start the wash program

Motor/door

Change parameters in the current program step

Water/drain

There are many operations which can be performed while a program is running

Rapid advance

Heating

Pause

Detergent signals and water flushing

Manual operation

Statistics

Here you can find information on machine operating times and the latest errors detected

Text

Change wash program after starting

Select "Memory card" function

A "Memory card" is a plastic card containing a memory chip which can store wash programs. It can be used, amongst other things, for transferring programs between washer extractors

Change temperature scale°C/°F

Run a wash program from memory card

Auto restart

Copy a program from card to PCU

Copy a program from PCU to card

Delete a program from a card

Delete all programs from a card

3657 A

Intentionally blank

General introduction

This washer extractor is controlled by a microprocessor-based program control unit. There are many advantages to this equipment, including:

- timing, levels, motor speeds and temperatures are controlled with great precision and flexibility

- detailed information on wash programs, machine status and operations, wash times and temperatures can be accessed in plain language on the large display screen

- it is possible for the user to create new wash programs, and to customize programs based on experience to suit various types of textile, degrees of soiling etc.

- a very high level of machine safety through continuous monitoring and built-in safety interlocks

- the program control unit has a reader for "memory cards". These are cards the size of a credit card which contain a memory chip. Memory cards allow the user to:

  - transfer wash programs between a PC and the washer , or from one washer to another

  - run programs straight from a card
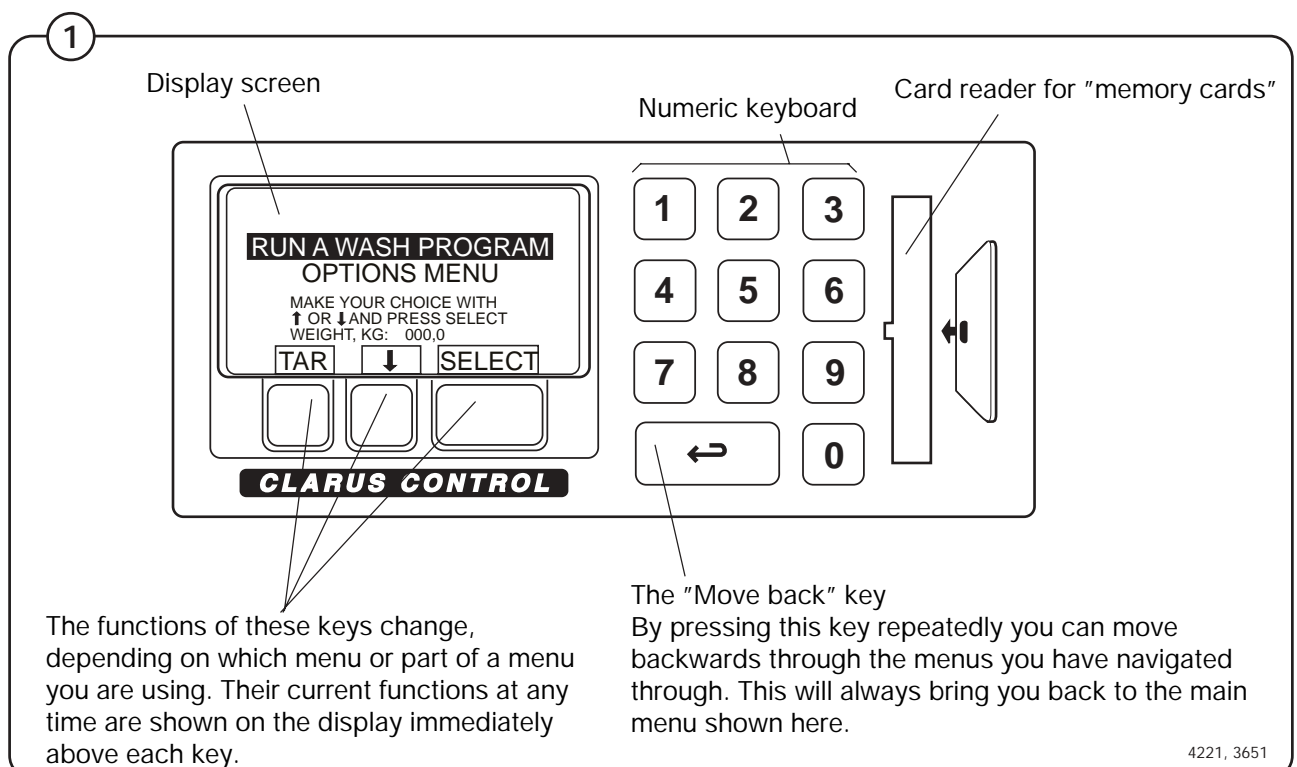
- great flexibility during program operation:

  - rapid advance both forwards and backwards in the program

  - change temperatures, program module lengths and extraction speeds directly, during program operation

  - start a different program at any time during program operation.

Display screen

Numeric keyboard

Card reader for "memory cards"

RUN A WASH PROGRAM
OPTIONS MENU
MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG: 000,0
TAR   ↓   SELECT

CLARUS CONTROL

The functions of these keys change, depending on which menu or part of a menu you are using. Their current functions at any time are shown on the display immediately above each key.

The "Move back" key
By pressing this key repeatedly you can move backwards through the menus you have navigated through. This will always bring you back to the main menu shown here.

4221, 3651

The "Move back" key

If you find you are in the wrong place, or if you want to undo earlier key presses:

Press the "Move back" key one or more times.

The "Move back" function

Each press of the "Move back" key moves you back one menu, in reverse order. By pressing this key repeatedly you can return to this menu at any time:

RUN A WASH PROGRAM
OPTIONS MENU

MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG: 000,0

TAR   ↓   SELECT

To start the wash program

RUN A WASH PROGRAM
OPTIONS MENU

MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG 000,0

✳   ↓   SELECT

If this menu is not currently displayed:
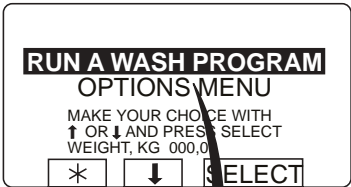
Press ↩ **repeatedly.**

RUN A WASH PROGRAM
OPTIONS MENU

If "OPTIONS MENU" is highlighted:

Press ↑ .

RUN A WASH PROGRAM
OPTIONS MENU

When "RUN A WASH PROGRAM" is highlighted:

SELECT

Press SELECT.

Two ways of starting a program

By entering the actual program number
Enter the actual program number if you know it, then press **SELECT**.

**By starting from the program library
(see section "To start a wash program from the program library)**
If you are unsure about the programs available, you can select a program from the program library, where the programs are listed with their descriptions.

RUN A WASH PROGRAM
ENTER A PROGRAM NUMBER:

101

SELECT FROM LIBRARY

| CLS | SMC | 993 |

3581 A

for example: **991**

SELECT

Here you can select programs from the program libraries. See the section entitled "To start a wash program from the program library".

Displayed here will be the number of the most frequently used program. S993 would indicate the number of a program on a memory card.

Press this key if you want to select this program. Use the numeric keys to enter the program number

Press SELECT.

If you have entered the wrong number

Enter the correct number to overstrike the earlier one.

Note: you must always enter three digits, even when the number is really only a one or two-digit number.

Examples:

The program number required is **9**. Enter **009** to overstrike all digits in the wrong number.

The program number required is **19**. Enter **019** to overstrike all digits in the wrong number.

RUN A WASH PROGRAM
ENTER A PROGRAM NUMBER:

101

FROM CLS OR SMC?

| CLS | SMC | OK |

4031 A

CLS

SMC

If you have a memory card in the program control unit, and the program you selected is both on the memory card and in the PCU, you will be asked "FROM CLS OR SMC?".

Press CLS if you want to take the program from the PCU.

Press SMC if you want to take the program from the memory card.

In some of the text shown on the display, Clarus Control is referred to as CLS and the memory card is referred to as SMC.

Memory cards

A memory card is a plastic card, the size of a credit card, with an electronic memory chip inside it. This card is capable of storing 10 to 15 wash programs of normal size. If the programs are mostly small ones, more of them can be stored, whereas larger programs will reduce the number which can be held by the card. Memory cards of this type can be used to:

- transfer wash programs from one washer extractor to another
- run wash programs straight from the card
- transfer wash programs from a PC to a memory card and from a memory card to a PC (these procedures, and how to write a wash program on a PC, are described elsewhere).

Memory cards are described in detail in the section entitled "The Memory card".

Procedure for use

```
┌─────────────────────────────┐
│ RUN A WASH PROGRAM          │
│ ENTER A PROGRAM NUMBER:      │
│                             │
│  91      00:00              │
│                             │
│ NORMAL 95°C STD             │
│  [▣TEXT▣]  [START]          │
└─────────────────────────────┘
```
3582

— Delayed start time (hrs:mins)
— Program name

[▣ TEXT ▣]

If you want to see the description of the program:

Press [TEXT].

┌─ *Pressing "Text" displays more information* ─┐
The text displayed is a description of the wash program selected. This text description is inserted when a new wash program is created. This procedure is described fully in the programming manual.
└───┘

Choose 1 or 2:

① [START] 1 To start the program now:
Press START.

② [1][2][3] 2 [Delayed start]
[4][5][6] **Use the numeric keys to enter a time (max. 99 hrs). This parameter appears on the right of the display.**
[7][8][9]
[0]

[START] **Press START.**

┌─ *Delayed start* ─┐
Delayed start means that the machine will not start the wash program until the time entered has elapsed.

This function allows you, for example, to load the machine in the evening, but delay the start of the wash until early the next morning, to end in time for the next shift.
└───────────────────┘

```
┌─────────────────────────────┐
│ DELAYED START               │
│ ENTER A PROGRAM NUMBER:      │
│                             │
│  91      14:30              │
│                             │
│ NORMAL 95°C STD             │
│  [✳]  [✳]  [EXIT]           │
└─────────────────────────────┘
```

— Time left before the machine is to start

[EXIT] If you want to cancel the delayed start:
Press EXIT

(⮐)
3627

During a wash program:
Press (⮐) to make the machine pause during the wash program.

┌─ *Two ways of pausing during a wash program* ─┐
There are two ways of pausing during a wash program:
1 By pressing (⮐) .
2 As an additional function. This is described in **section "Pause"**.
└───┘

The following information is displayed during the wash program:

Current program step

Time left for this program step

Set temperature

Actual temperature

Remaining program time

Drum speed

```
91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH        1
STEP TIME:                    720  SEC
SET TEMPERATURE              85  C
ACTUAL TEMPERATURE:          21  C
REMAINING TIME:              70  MIN
DRUM SPEED:        _____  1000  RPM

SHOW WEIGHT
RAPID ADVANCE
   ↑      ↓    SELECT
3583
```

```
SHOW WEIGHT
RAPID ADVANCE
PAUSE
MANUAL FUNCTIONS
TEXT
SELECT NEW WASH PROGRAM
CHANGE °F/°C
AUTO RESTARTS
```
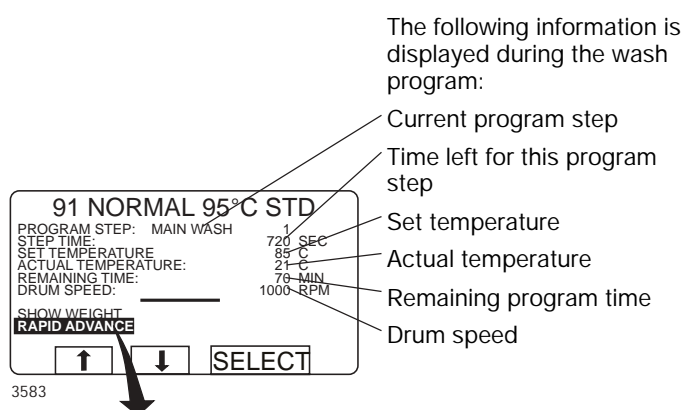
↓

↑

SELECT

If required:

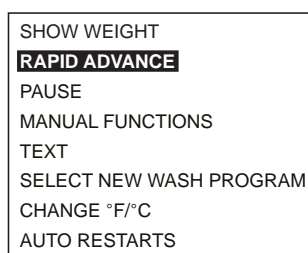**Select a function using the cursor keys.**

Press SELECT.

To terminate a program before it has finished

- Select RAPID ADVANCE and press SELECT. Advance to "END OF PROGRAM" and press SELECT.
- Wait until "THE DOOR IS OPEN" appears on the display.
- Now the door can be opened.

To change parameters in the current program step

See section "To change parameters in the current program step".

Certain program step parameters can be altered during the course of the program. In the example (left), the length of the program step and the heating temperature can be altered.

Additional functions during the program

Rapid advance (see section "To change parameters in the current program step")
Rapid advance through the program to the program step required. Rapid advance can be used to move both forwards and backwards through the program.

Display weight (see section "Display weight")
The actual load weight is shown in large digits on the display (weight display mode). (On machines with weighing equipment only.)

No water level reduction (see section "No water level reduction")
Machines with weighing equipment installed adjust the water level automatically according to the load weight. This function lets you switch off water level reduction during the current program.

Pause (see section "Pause")
The machine stops. The drain valve remains closed. Another way to pause the program: Press ⏎ .

Manual functions (see section "Manual operation during a program")
The following functions can be controlled manually during the course of the program:

- all water valves, drain and pumps (where applicable).
- limit highest extraction speed.
- motor on/off after end of wash program.
- flush detergent.

Text (see section "Text")
Display description of wash program (if available).

Select a different wash program (see section "To change the wash program after program operation has commenced")
You can switch to using a different wash program at any stage during the wash. Once this function has been selected, the current step (for example, rinse) of the earlier program will be allowed to finish and then the new program will start (from the beginning).

Change temperature scale °C or °F (see section "To change temperature scale °C/°F")

Auto restart (see section "Auto restart")
Here you enter the number of times you wish the wash program to restart automatically.

Procedure for use

To start a wash program from the program library

RUN A WASH PROGRAM
OPTIONS MENU
MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG 000,0
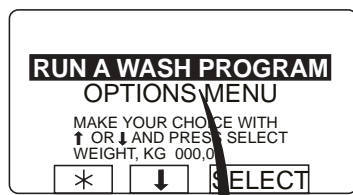
| ✳ | ↓ | SELECT |

3580

RUN A WASH PROGRAM
OPTIONS MENU

| ↑ |

RUN A WASH PROGRAM
OPTIONS MENU

| SELECT |

If this menu is not currently displayed:

Press ↵ **repeatedly.**

If "GO TO THE MENU" is highlighted:

Press ↑ .

When "RUN A WASH PROGRAM" is highlighted:

Press SELECT.

What is the program library?

The program library lists all wash programs, both user and standard programs, showing their program numbers and a description, for example:

1	MY OWN 40 °C
2	MY OWN 60 °C
3	MY OWN 90 °C
991	NORMAL 95°C STD
992	NORMAL 60°C STD
993	NORMAL 40°C STD
994	INTENSIVE 95°C
995	INTENSIVE 60°C
996	PERM. PRESS 60°C
997	PERM. PRESS 40°C
998	LOW EXTRACT 1 MIN
999	HIGH EXTRACT 5 MIN

Each time a new program is stored in the machine program memory, its number and description will be inserted automatically into the program library.

The program library may be used for starting a wash program, but is also used in programming, when a wash program needs to be modified or if a new program is to be created on the basis of an existing one.

RUN A WASH PROGRAM
ENTER A PROGRAM NUMBER:

101

FROM CLS OR SMC?

| CLS | SMC | | OK |

4031 A

CLS

SMC

To select a program from the PCU program library:

Press CLS.

If there is a memory card in the PCU and you wish to select a program on that:

Press SMC.

You can also select the program library via the option "GO TO THE MENU". Then select "WASH PROGRAM LIBRARY".

▨▨▨ MENU ▨▨▨
MAKE A CHOISE:
WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
↓ STATISTICS

| ↓↓ | ↓ | SELECT |

3590

WASH PROGRAM LIBRARY

PROGRAMMING MODE

SETTINGS 1

MEMORY CARD

SERVICE MODE

STATISTICS

MANUAL FUNCTIONS

SETTINGS 2

EXIT

LIBRARY
PR.NO.   NAME
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE   95°C
995   INTENSIVE   60°C
996   PERM. PRESS 60°C
997   PERM. PRESS 40°C
998   LOW EXTRACT 1 MIN
999   HIGH EXTRACT 5 MIN

| ✳ | ↓ | SELECT |

3591

↓

991	NORMAL 95°C STD
992	NORMAL 60°C STD
993	NORMAL 40°C STD
994	INTENSIVE 95°C
995	INTENSIVE 60°C
996	**PERM. PRESS 60°C**
997	PERM. PRESS 40°C
998	LOW EXTRACT 1 MIN
999	LOW EXTRACT 5 MIN

Press ↓ **the required number of times...**

...to highlight the wash program required.

SELECT

Press SELECT.

```
RUN A WASH PROGRAM
ENTER A PROGRAM NUMBER:
91        00:00
NORMAL  95°C STD
   ⊡ TEXT ⊡     START
```
3582
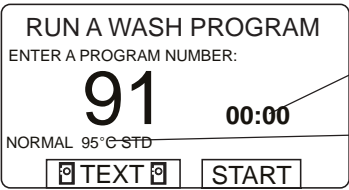
Delayed start time
(hrs:mins)

Program name

⊡ TEXT ⊡

If you want to see the
description of the program:

Press TEXT

Pressing "Text" displays more information

The text displayed is a description of the wash
program selected. This text description is inserted
when a new wash program is created. This
procedure is described fully in the programming
manual.

① START

Choose 1 or 2:

1 To start the program now:

Press START.

②

1	2	3
4	5	6
7	8	9
	0	

2 Delayed start

**Use the numeric keys to
enter a time (max. 99
hrs). This parameter
appears on the right of
the display.**

START

Press START.

Delayed start

Delayed start means that the machine will not start
the wash program until the time entered has
elapsed.

This function allows you, for example, to load the
machine in the evening, but delay the start of the
wash until early the next morning, to end in time for
the next shift.

```
DELAYED START
ENTER A PROGRAM NUMBER:
91        14:30
NORMAL  95°C STD
   *    *    EXIT
```
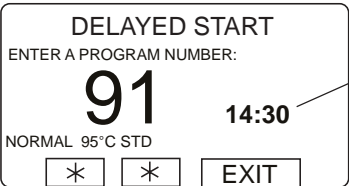
Time (in hours and
minutes) left before the
machine is to start.

Olf you want to cancel the
delayed start:
Press EXIT.

EXIT

The functions which are
available during program
operation are described in
sections "To change
parameters in the current
program step - Auto restart".

To change parameters in the current program step

```
   91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH      1
STEP TIME:                   720   SEC
SET TEMPERATURE:              85   °C
ACTUAL TEMPERATURE:           21   °C
REMAINING TIME:               70   MIN
DRUM SPEED:                 1000   RPM

█SHOW WEIGHT█
RAPID ADVANCE

  [↑]    [↓]    SELECT
```
3584

During program operation the display will look like this (see section "To start the wash program").

You can alter the following program steps:

Prewash, Main wash, Rinse, Drain, Soak
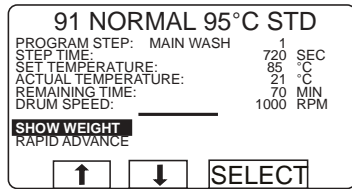   Length of program step (max. 9998 seconds), heating temperature (max. 97°C).

Extraction
   Length of program step (max. 3599seconds), extraction speed.

[↑]   Press [↑] one or more times...

```
   91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH      1
█STEP TIME:                  720   SEC█
SET TEMPERATURE:              85   °C
ACTUAL TEMPERATURE:           21   °C
REMAINING TIME:               70   MIN
DRUM SPEED:                 1000   RPM

SHOW WEIGHT
RAPID ADVANCE

  [↑]    [↓]    SELECT
```
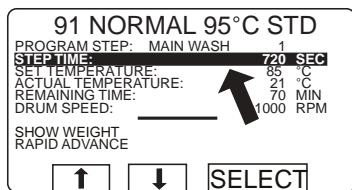
...to highlight the line required.

If you have entered the wrong parameter

Continue pressing numeric keys to overstrike the incorrect parameter.

Note: always use the same number of digits as used on the display to overstrike the incorrect parameter.

Example:

To change the time for the program step to **30** seconds, enter **030** to overstrike the earlier parameter.

SELECT   Press SELECT.

[1] [2] [3]

[4] [5] [6]   Use the numeric keys to enter the new parameter .

[7] [8] [9]

[0]

SELECT   Press SELECT.

Rapid advance

```
   91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH      1
STEP TIME:                  720 SEC
SET TEMPERATURE              85 C
ACTUAL TEMPERATURE:         21 C
REMAINING TIME:             70 MIN
DRUM SPEED:       _____  1000 RPM
SHOW WEIGHT
RAPID ADVANCE
┌──────┬──────┐ ┌────────┐
│  ↑   │  ↓   │ │ SELECT │
└──────┴──────┘ └────────┘
3583
```

```
┌──────────────────────────────┐
│ SHOW WEIGHT                   │
│ RAPID ADVANCE                 │
│ PAUSE                         │
│ MANUAL FUNCTIONS              │
│ TEXT                          │
│ SELECT NEW WASH PROGRAM       │
│ CHANGE °F/°C                  │
│ AUTO RESTARTS                 │
└──────────────────────────────┘
```

During program operation the display will look like this (see section "To start the wash program").

Check that ″RAPID ADVANCE″ is highlighted.

┌──────┐
│ ↓   │
└──────┘
┌──────┐
│ ↑   │
└──────┘

If it is not highlighted:
Press │ ↑ │ or │ ↓ │ one or more times to highlight ″RAPID ADVANCE″.

┌────────┐
│ SELECT │
└────────┘

Press SELECT.

┌───┐
│ *To terminate a program before it has finished* │
│ • Select RAPID ADVANCE and press SELECT.   │
│   Advance to ″END OF PROGRAM″ and press   │
│   SELECT.   │
│ • Wait until ″THE DOOR IS UNLOCKED″ appears   │
│   on the display.   │
│ • Now the door can be opened.   │
└───┘

```
  91 NORMAL 95°C STD
RAPID ADVANCE
PRE WASH      1
EXTRACT       1
MAIN WASH     1
EXTRACT       2
RINSE         1
  [↑]    [↓]   SELECT
3586
```

```
PRE WASH        1
EXTRACT         1
MAIN WASH       1
EXTRACT         2
RINSE           1
EXTRACT         3
RINSE           2
EXTRACT         4
RINSE           3
EXTRACT         5
END OF PROGRAM
```

[↑]

[↓]

Press [↓] or [↑] one or more times to highlight the program step you wish to advance to.

SELECT Press **SELECT**.

Rapid advance works in both directions

Rapid advance works in both directions, using [↓] and [↑] .

Using rapid advance to move forwards allows you to skip one or more program steps. Using rapid advance backwards allows you to repeat one or more program steps.
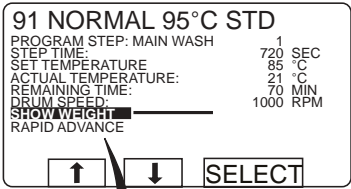

Automatic return to normal display

Once you have selected any of the functions below, you must make any changes required within 20 seconds. If no further keys are pressed within 20 seconds, the display will revert automatically to its normal appearance during a wash program.

Procedure for use

For machines with weighing equipment installed only!

Show weight

```
91 NORMAL 95°C STD
PROGRAM STEP: MAIN WASH        1
STEP TIME:                   720  SEC
SET TEMPERATURE               85  °C
ACTUAL TEMPERATURE:           21  °C
REMAINING TIME:               70  MIN
DRUM SPEED:                 1000  RPM
SHOW WEIGHT
RAPID ADVANCE

     ↑        ↓      SELECT
```
4774

During program operation the display will look like this (see section "To start the wash program").

```
SHOW WEIGHT

RAPID ADVANCE

NO WATER REDUCTION

PAUSE

MANUAL FUNCTIONS

TEXT

SELECT NEW WASH PROGRAM

CHANGE °F/°C

AUTO RESTART
```

↓

↑

Press ↑ or ↓ one or more times to highlight "SHOW WEIGHT".

SELECT

Press SELECT.

```
   CLARUS CONTROL
    WEIGHT, KG:

     007,0

   [ * ] [ * ]  [  *  ]
```
4775

Weight display mode:

The actual net weight is shown in large digits on the display.

For machines with weighing equipment installed only!

No water reduction
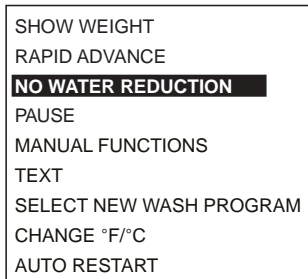
```
91 NORMAL 95°C STD
PROGRAM STEP: MAIN WASH        1
STEP TIME:                   720  SEC
SET TEMPERATURE               85  °C
ACTUAL TEMPERATURE:           21  °C
REMAINING TIME:               70  MIN
DRUM SPEED:      _____     1000 RPM

SHOW WEIGHT
RAPID ADVANCE
    ↑      ↓      SELECT
```
4776

```
SHOW WEIGHT
RAPID ADVANCE
NO WATER REDUCTION
PAUSE
MANUAL FUNCTIONS
TEXT
SELECT NEW WASH PROGRAM
CHANGE °F/°C
AUTO RESTART
```

During program operation the display will look like this (see section "To start the wash program").

— **No water reduction** —

The wash load is weighed during the program and the water level is adjusted automatically according to its weight. If the load is not a full one, the water level will be reduced according to a water level reduction table. You can switch off water level reduction at any stage of a program.

Note that if you select "NO WATER REDUCTION", this applies only to the program currently running. The next time a program is started, water level reduction will occur automatically again.

↓ ↑   **Press** ↑ **or** ↓ **one or more times to highlight "NO WATER REDUCTION".**

SELECT   **Press SELECT.**

Procedure for use

Pause

```
┌─────────────────────────────┐
│ 91 NORMAL 95°C STD          │
│ PROGRAM STEP:  MAIN WASH     1 │
│ STEP TIME:              720 SEC │
│ SET TEMPERATURE          85 °C  │
│ ACTUAL TEMPERATURE:      21 °C  │
│ REMAINING TIME           70 MIN │
│ DRUM SPEED:  _____     70 RPM │
│                             │
│ SHOW WEIGHT                 │
│ RAPID ADVANCE               │
│   ┌──┐  ┌──┐ ┌────────┐     │
│   │ ↑ │  │ ↓ │ │ SELECT │     │
│   └──┘  └──┘ └────────┘     │
└─────────────────────────────┘
3587
```

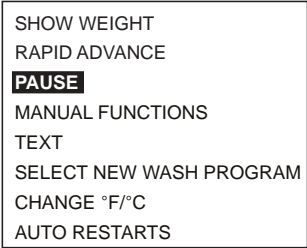During program operation the display will look like this (see section "To start the wash program").

```
┌─────────────────────────────┐
│ SHOW WEIGHT                 │
│ RAPID ADVANCE               │
│ ▐PAUSE▌                     │
│ MANUAL FUNCTIONS            │
│ TEXT                        │
│ SELECT NEW WASH PROGRAM     │
│ CHANGE °F/°C                │
│ AUTO RESTARTS               │
└─────────────────────────────┘
```

┌───┐
│ ↓ │
└───┘

┌───┐
│ ↑ │
└───┘

Press ┌───┐ or ┌───┐ one or
      │ ↑ │   │ ↓ │
      └───┘   └───┘
more times to highlight
"PAUSE".

┌────────┐
│ SELECT │   Press **SELECT**.
└────────┘

```
┌─────────────────────────────┐
│ 91 NORMAL 95° STD           │
│ PROGRAM STEP:  MAIN WASH   1 │
│                             │
│                             │
│   🔲🔲 PAUSE 🔲🔲            │
│                             │
│   ┌──┐ ┌──┐ ┌────────┐      │
│   │ ✳ │ │ ✳ │ │ START  │      │
│   └──┘ └──┘ └────────┘      │
└─────────────────────────────┘
3588
```

┌────────┐
│ START │   **Press START to restart the**
└────────┘   **wash program.**

Two ways of pausing during a wash program

Note that you must be in normal wash mode to be able to pause in this way. If, for example, you are using "Manual Functions", you will have to exit that first before you can use Pause.

There are two ways of pausing during a wash program:

1 As an additional function. This is described in this section.

2 By pressing ┌─────┐ .
                │ ↵ │
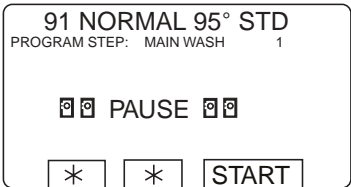   └─────┘

When the machine pauses:

· Program operation is halted.
· Filling is halted (where applicable).
· Heating is halted (where applicable).
· The motor stops.
· The drain valve remains closed.
· The door cannot be opened.

Manual operation during a program

```
┌─────────────────────────────────────┐
│    91 NORMAL 95°C STD                │
│ PROGRAM STEP:   MAIN WASH      1     │
│ STEP TIME:                  720 SEC  │
│ SET TEMPERATURE              85 C    │
│ ACTUAL TEMPERATURE:          21 C    │
│ REMAINING TIME:              70 MIN  │
│ DRUM SPEED:     _____   1000 RPM  │
│                                      │
│ SHOW WEIGHT                          │
│ RAPID ADVANCE                        │
│  ┌───┐ ┌───┐ ┌──────────┐            │
│  │ ↑ │ │ ↓ │ │  SELECT  │            │
│  └───┘ └───┘ └──────────┘            │
└─────────────────────────────────────┘
3585
```

During program operation the display will look like this (see section **"To start the wash program").**

```
┌─────────────────────────────────────┐
│  SHOW WEIGHT                         │
│  RAPID ADVANCE                       │
│  PAUSE                               │
│  ▐MANUAL FUNCTIONS▌                  │
│  TEXT                                │
│  SELECT NEW WASH PROGRAM             │
│  CHANGE °F/°C                        │
│  AUTO RESTARTS                       │
└─────────────────────────────────────┘
```

┌───┐	Press ┌───┐ or ┌───┐ one
│ ↓ │	│ ↑ │ │ ↓ │
└───┘	or more times to highlight
┌───┐	"MANUAL FUNCTIONS".
│ ↑ │	
└───┘	

┌──────────┐
│ SELECT │   Press **SELECT**.
└──────────┘

Two types of manual operation

There are two types of manual operation, which should not be confused:

- **Manual operation during a program**

  These functions are described in this section.

- **Manual operation when no program is running**

  These functions are described in **section "Manual operation".**

```
MANUAL FUNCTIONS
MAKE A CHOICE:
WATER/DRAIN
HIGH EXTRACT
MOTOR
DETERGENT/FLUSH
EXIT

  [ * ]  [   ]  SELECT
```
3679

```
WATER/DRAIN
HIGH EXTRACT
MOTOR
DETERGENT/FLUSH
EXIT
```
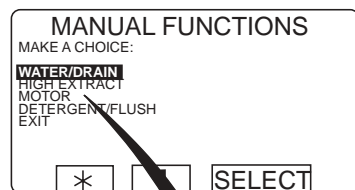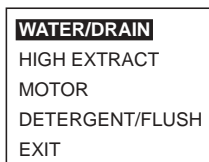
[↓]
Use the cursor keys to select the function.

[↑]

SELECT   **Press SELECT.**

Automatic return to normal display

Once you have selected any of the functions below, you must make any changes required within 20 seconds. If no further keys are pressed within 20 seconds, the display will revert automatically to its normal appearance during a wash program.

Manual functions during a wash program

Water/drain (see section "Water/drain")
    Allows manual operation of all water valves and the drain valve.

Highest extraction speed (see section "Maximum extraction speed")
    Here you can limit the maximum extraction speed for the current program.

Motor (see section "Motor on after wash")
    Motor on/off after program has ended.

Detergent valves (see section "Detergent signals and water flushing")
    Allows you to control all valves in the detergent compartment or in external detergent supply system.

Water/drain

```
MANUAL FUNCTIONS
       WATER/DRAIN
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
LEVEL:  63 UNITS
   ✳    ↓    OPEN
```
3680

To access this function, see instructions in section "Manual operation".

Water level in drum

↓

↑

Use ↓ and ↑ to select the water/drain option you require.

```
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
DRAIN
EXIT
```

OPEN

Press OPEN.
The function will be activated for as long as you press and hold this key. The function ceases as soon as you release the key.

↓

```
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
DRAIN
EXIT
```

When you have finished:

Press ↓ repeatedly to highlight "EXIT".

SELECT   Press SELECT.

Maximum extraction speed

```
MANUAL FUNCTIONS
        HIGH EXTRACT
CURRENT MAXIMUM EXTCACT SPEED: 1000 RPM
SELECT NEW EXTRACT SPEED:
        1000 RPM
   [↑]   [↓]  SELECT
```
3681

To access this function, see instructions in section "Manual operation".

Maximum extraction speed in current program.

```
[1] [2] [3]
[4] [5] [6]
[7] [8] [9]
       [0]
```

Enter the maximum extraction speed you require for this program.

SELECT **Press SELECT.**

To limit the program's highest extraction speed

This function allows you to modify the highest extraction speed allowed during the program.

Example:

Assume that the highest speed in the program is 1000 rpm and that you have set 700 rpm as the highest speed allowed.

All speeds above 700 rpm will be limited to 700 rpm

Speeds below 700 rpm will not be affected
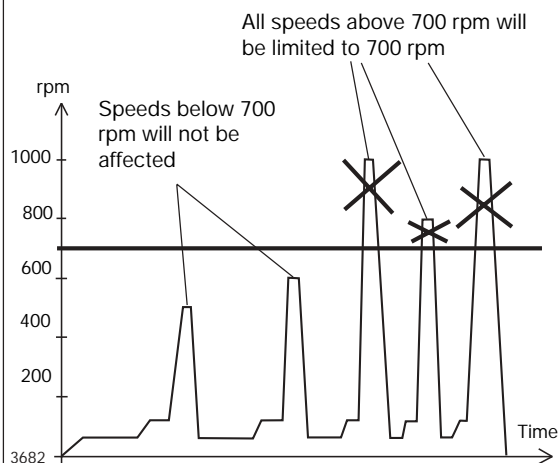
This change will affect the current program only. No change will be implemented if extraction is taking place at the time of the (attempted) change. The next time that this program is used, the original maximum speed will apply.

This function does not allow you to set a **higher** speed than the usual maximum speed for the program.

Motor on after wash
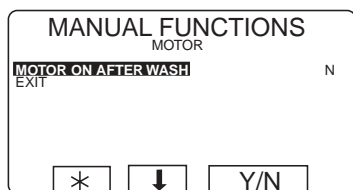
```
┌─────────────────────────────────┐
│      MANUAL FUNCTIONS           │
│            MOTOR                │
│ ▓MOTOR ON AFTER WASH▓        N   │
│  EXIT                           │
│                                 │
│  ┌────┐  ┌────┐  ┌──────┐       │
│  │ ✳  │  │ ↓  │  │ Y/N  │       │
│  └────┘  └────┘  └──────┘       │
└─────────────────────────────────┘
3683
```

To access this function, see instructions in section "Manual mode".

┌──────┐
│ Y/N │
└──────┘

A toggle function:
Use Y/N to toggle the function from ON (Yes) to OFF (No).

┌──────┐
│ ↓   │
└──────┘

When you have finished:
Press ↓ to highlight "EXIT".

```
┌──────────────────────────────┐
│ MOTOR ON AFTER WASH │
│ ▓EXIT▓              │
└──────────────────────────────┘
```

┌────────┐
│ SELECT │
└────────┘

Press SELECT.
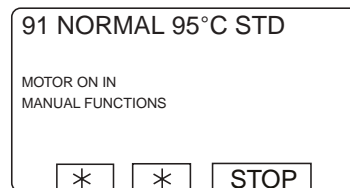
┌──── *Motor to rotate after program has ended* ────┐
│ If you answer **Yes (Y)**:   │
│ The motor will continue to rotate in alternative   │
│ directions after the program has ended. This   │
│ prevents creasing of the load.   │
│ When the program has ended, the display will look │
│ like this: │
│   │
│   ┌────────────────────────────────┐   │
│   │ 91 NORMAL 95°C STD   │   │
│   │   │   │
│   │ MOTOR ON IN   │   │
│   │ MANUAL FUNCTIONS   │   │
│   │   │   │
│   │ ┌────┐ ┌────┐ ┌──────┐   │   │
│   │ │ ✳ │ │ ✳ │ │ STOP │   │   │
│   │ └────┘ └────┘ └──────┘   │   │
│   └────────────────────────────────┘   │
│   4111   │
│   │
│ **Press STOP to stop the motor.**   │
└──┘

Procedure for use

Detergent signals and water flushing

```
MANUAL FUNCTIONS
    DETERGENT/FLUSH
WATER FLUSH
FLUSH COLD POWDER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4

  ✳    ↓    OPEN
```
3684
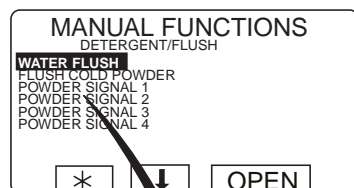
To access this function, see instructions in section "Manual mode".

↓
↑

Use ↓ and ↑ to select the function you require.

```
WATER FLUSH
FLUSH COLD WATER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4
POWDER SIGNAL 5
LIQUID DETERGENT 1
LIQUID DETERGENT 2
LIQUID DETERGENT 3
LIQUID DETERGENT 4
EXIT
```

Detergent signals and water flushing

FLUSH WATER:
This function uses water to clear detergent from the supply tubes of the detergent dispensing system.

POWDER SIGNAL:
This function will either: a) use water to dispense detergent from machine compartments, or: b) dispense detergent from an external system. The number of valves present will vary according to the machine type.

OPEN
↓

Press OPEN.
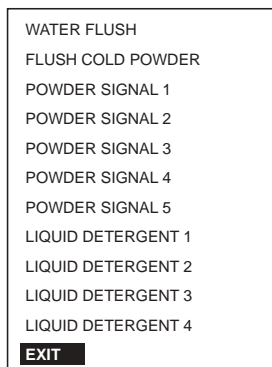The function will be activated for as long as you press and hold this key. The function ceases as soon as you release the key.

When you have finished:
Press ↓ repeatedly to highlight "EXIT".
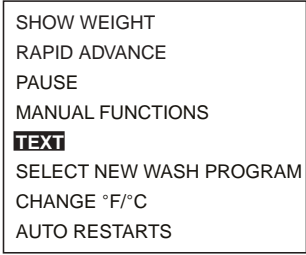
```
WATER FLUSH
FLUSH COLD POWDER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4
POWDER SIGNAL 5
LIQUID DETERGENT 1
LIQUID DETERGENT 2
LIQUID DETERGENT 3
LIQUID DETERGENT 4
EXIT
```

SELECT **Press SELECT.**

Text

```
┌─────────────────────────────────────┐
│       91 NORMAL 95°C STD             │
│ PROGRAM STEP:  MAIN WASH        1    │
│ STEP TIME:                  720  SEC │
│ SET TEMPERATURE              85  C   │
│ ACTUAL TEMPERATURE:          21  C   │
│ REMAINING TIME:              70  MIN │
│ DRUM SPEED:      _____   1000  RPM │
│                                      │
│ SHOW WEIGHT                          │
│ RAPID ADVANCE                        │
│  ┌──┐  ┌──┐  ┌──────────┐            │
│  │ ↑│  │ ↓│  │  SELECT  │            │
│  └──┘  └──┘  └──────────┘            │
│ 3592                                 │
└─────────────────────────────────────┘
```

During program operation the display will look like this (see section "To start the wash program".

The text displayed is a description of the wash program selected. This text description is inserted when a new wash program is created. This procedure is described fully in the programming manual.

```
┌─────────────────────────────────────┐
│  SHOW WEIGHT                         │
│                                      │
│  RAPID ADVANCE                       │
│                                      │
│  PAUSE                               │
│                                      │
│  MANUAL FUNCTIONS                    │
│                                      │
│  █TEXT█                              │
│                                      │
│  SELECT NEW WASH PROGRAM             │
│                                      │
│  CHANGE °F/°C                        │
│                                      │
│  AUTO RESTARTS                       │
└─────────────────────────────────────┘
```

┌──┐
│ ↓│   Press ┌──┐ or ┌──┐ one or
└──┘   │ ↑│   │ ↓│ more times to highlight
┌──┐   └──┘   └──┘ "TEXT".
│ ↑│
└──┘

┌──────────┐
│ SELECT │   Press SELECT.
└──────────┘

```
┌─────────────────────────────────────┐
│       91 NORMAL 95°C STD             │
│ PROGRAM STEP:   MAIN WASH       1    │
│ NORMAL PROGRAM FOR MEDIUM SOILED     │
│ CLOTHES                              │
│                                      │
│               _____                │
│ █TEXT█                               │
│ AUTO RESTARTS                        │
│  ┌──┐  ┌──┐  ┌──────────┐            │
│  │ ↑│  │ ↓│  │  SELECT  │            │
│  └──┘  └──┘  └──────────┘            │
│ 3630                                 │
└─────────────────────────────────────┘
```

Description of wash program

┌──────────┐
│ SELECT │   To return to the normal
└──────────┘   display:
                Press SELECT again.

If you do not press SELECT within 20 seconds, the display will revert automatically.

Procedure for use

To change the wash program after program operation has commenced

```
 91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH        1
STEP TIME:                     720  SEC
SET TEMPERATURE                 85  °C
ACTUAL TEMPERATURE:             21  °C
REMAINING TIME                  70  MIN
DRUM SPEED:                   1000  RPM

SHOW WEIGHT
RAPID ADVANCE

  ↑        ↓      SELECT
```
3694

```
SHOW WEIGHT

RAPID ADVANCE

PAUSE

MANUAL FUNCTIONS

TEXT

SELECT NEW WASH PROGRAM

CHANGE °F/°C

AUTO RESTARTS
```

During program operation the display will look like this (see section "To start the wash program".

↓
↑

Press ↑ or ↓ one or more times to highlight "SELECT NEW WASH PROGRAM".

SELECT

Press SELECT.

```
 91  NORMAL 95°C STD
SELECT NEW PROGRAM AND PRESS SELECT
PR NO.    NAME
991      NORMAL 95°C STD
992      NORMAL 60°C STD
993      NORMAL 40°C STD
994      INTENSIVE 95°C
995      INTENSIVE 60°C
996      PERM PRESS 60°C

   *        ↓       SELECT
```
3695

↓

Press ↓ one or more times as required...

Automatic return to normal display

If no key is pressed within 20 seconds, the display will revert automatically.

```
991    NORMAL 95°C STD

992    NORMAL 60°C STD

993    NORMAL 40°C STD

994    INTENSIVE 95°C

995    INTENSIVE 60°C

996    PERM. PRESS 60°C

997    PERM. PRESS 40°C

998    LOW EXTRACT 1 MIN

999    HIGH EXTRACT 5 MIN
```

...to highlight the new wash program.

SELECT

Press SELECT.

```
 996 PERM. PRESS 60°C
PROGRAM STEP:   PREWASH          1
STEP TIME:                     120  SEC
NO HEATING
ACTUAL TEMPERATURE:             21  °C

DRUM SPEED:                     48  RPM

SHOW WEIGHT
RAPID ADVANCE

  ↑        ↓      SELECT
```

The existing wash program will now be interrupted and the new one will begin.

To change temperature scale °C/°F

```
91 NORMAL 95°C STD
PROGRAM STEP:   MAIN WASH      1
STEP TIME:                   720  SEC
SET TEMPERATURE               85  °C
ACTUAL TEMPERATURE:           21  °C
REMAINING TIME                70  MIN
DRUM SPEED:         _____  1000  RPM

SHOW WEIGHT
RAPID ADVANCE

  [↑]    [↓]    SELECT
```
3696

```
SHOW WEIGHT
RAPID ADVANCE
PAUSE
MANUAL FUNCTIONS
TEXT
SELECT NEW WASH PROGRAM
CHANGE °F/°C
AUTO RESTARTS
```

During program operation the display will look like this (see section "To start the wash program".

To change temperature scale °C/°F

This function changes the temperature scale used for all temperatures displayed during the wash program.

Please note that this scale change applies only to the current program. The default temperature scale will apply next time you run a program.

To change the default temperature scale for all programs, use the function "SETTINGS", which is described in the Service Manual.

[↓]
[↑]   Press [↑] or [↓] one or more times to highlight "CHANGE °C/°F".

SELECT   Press **SELECT**.

Auto restart

```
┌─────────────────────────────────────┐
│   91 NORMAL 95°C STD                 │
│ PROGRAM STEP:   MAIN WASH      1     │
│ STEP TIME:                  720 SEC  │
│ SET TEMPERATURE             85  °C   │
│ ACTUAL TEMPERATURE:         21  °C   │
│ REMAINING TIME              70  MIN  │
│ DRUM SPEED:               1000  RPM  │
│                                      │
│ SHOW WEIGHT                          │
│ RAPID ADVANCE                        │
│  ┌───┐ ┌───┐ ┌──────────┐            │
│  │ ↑ │ │ ↓ │ │ SELECT   │            │
│  └───┘ └───┘ └──────────┘            │
└─────────────────────────────────────┘
3593
```

```
┌─────────────────────────────────────┐
│  SHOW WEIGHT                         │
│                                      │
│  RAPID ADVANCE                       │
│                                      │
│  PAUSE                               │
│                                      │
│  MANUAL FUNCTIONS                    │
│                                      │
│  TEXT                                │
│                                      │
│  SELECT NEW WASH PROGRAM             │
│                                      │
│  CHANGE °F/°C                        │
│                                      │
│  ▋AUTO RESTART▋                      │
└─────────────────────────────────────┘
```

┌───┐
│ ↓ │   **Press ↓ one or more**
└───┘   **times to highlight "AUTO**
        RESTART".
┌───┐
│ ↑ │
└───┘

┌──────────┐
│ SELECT   │   **Press SELECT.**
└──────────┘

```
┌─────────────────────────────────────┐
│   91 NORMAL 95°STD                   │
│ PROGRAM STEP:   MAIN WASH      1     │
│ STEP TIME:                  300 SEC  │
│ NO HEATING                           │
│ ACTUAL TEMPERATURE:         19  C    │
│ DRUM SPEED:                  70 RPM  │
│                                      │
│ AUTO RESTARTS´        0              │
│  ┌───┐ ┌───┐ ┌──────────┐            │
│  │ ↑ │ │ ✳ │ │ SELECT   │            │
│  └───┘ └───┘ └──────────┘            │
└─────────────────────────────────────┘
3594
```
Shows the number of
times the program will
restart.

┌───┐┌───┐┌───┐
│ 1 ││ 2 ││ 3 │
└───┘└───┘└───┘
┌───┐┌───┐┌───┐   If required:
│ 4 ││ 5 ││ 6 │   **Use the numeric keys to**
└───┘└───┘└───┘   **change the required**
┌───┐┌───┐┌───┐   **number of restarts.**
│ 7 ││ 8 ││ 9 │
└───┘└───┘└───┘
       ┌───┐
       │ 0 │
       └───┘

┌──────────┐
│ SELECT   │   **Press SELECT.**
└──────────┘

What is Auto restart?

Auto restart means that the same program will be
repeated one or more times, according to the
number set. The program will restart immediately,
and the door will remain locked. If you have set auto
restart, the display will show the number of restarts
left.

This function is used primarily for testing.

Manual operation

To select manual operation

```
┌─────────────────────────────────┐
│ RUN A WASH PROGRAM              │
│   OPTIONS MENU                  │
│ MAKE YOUR CHOICE WITH           │
│ ↑ OR ↓ AND PRESS SELECT         │
│ WEIGHT, KG: 000,0               │
│ [ ✳ ]  [ ↓ ]   SELECT          │
└─────────────────────────────────┘
3589
```

RUN A WASH PROGRAM
OPTIONS MENU

SELECT   Press SELECT.

If this menu is not currently displayed:
Press [↵] repeatedly.

[↓]   Press [↓] to highlight "GO TO THE MENU".
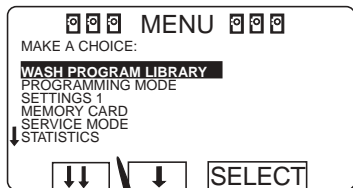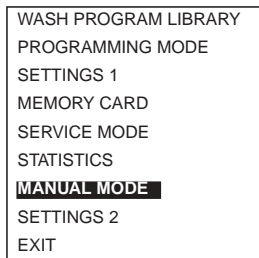
Always lock the door first!

You must always close and lock the door first before you can operate the machine manually.

To lock the door, use the submenu MOTOR/DOOR, **see section "Motor/door"**.

```
┌─────────────────────────────────┐
│  ▣▣▣  MENU  ▣▣▣                 │
│ MAKE A CHOICE:                  │
│ WASH PROGRAM LIBRARY            │
│ PROGRAMMING MODE                │
│ SETTINGS 1                      │
│ MEMORY CARD                     │
│ SERVICE MODE                    │
│ ↓ STATISTICS                    │
│ [ ↓↓ ]  [ ↓ ]   SELECT         │
└─────────────────────────────────┘
3685
```

```
┌─────────────────────────────────┐
│ WASH PROGRAM LIBRARY            │
│ PROGRAMMING MODE                │
│ SETTINGS 1                      │
│ MEMORY CARD                     │
│ SERVICE MODE                    │
│ STATISTICS                      │
│ MANUAL MODE                     │
│ SETTINGS 2                      │
│ EXIT                            │
└─────────────────────────────────┘
```

[↓]   Press [↓] six times...

....to highlight "MANUAL MODE".

SELECT   Press SELECT.

All manual settings are cancelled when you exit manual operation

All manual settings (such as door, motor, temperature, and drain) will be cancelled when you exit manual operation.

The door is unlocked, the motor stops, the drain opens, heating is halted, and the temperature is reset to zero.

Procedure for use

```
MANUAL FUNCTIONS
MAKE A CHOICE:
MOTOR/DOOR
WATER/DRAIN
HEATING
DETERGENT/FLUSH
EXIT

   *           SELECT
3686
```

```
MOTOR/DOOR
WATER/DRAIN
HEATING
DETERGENT/FLUSH
EXIT
```

[↓]

[↑]
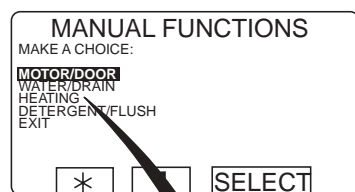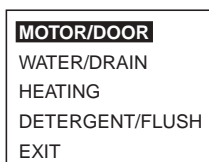
Select the function required using the cursor keys.

[SELECT] **Press SELECT.**

Manual operation when no program is running

Motor/door (see section "Motor/door")
 Lock/unlock door. Switch motor on/off (normal drum action).

Water and drain valves (see section "Water/drain")
 Operation of drain valve and all water valves.

Heating (see section "Heating")
 Heat water to any temperature required.

Detergent valves (see section "Detergent signals and water flushing")
 Allows manual operation of all valves in detergent compartment or external detergent supply system.

Exit
 Returns you to the MENU display.

Motor/door

```
MANUAL FUNCTIONS
       MOTOR/DOOR
DOOR LOCK ON                    N
MOTOR ON                        N
EXIT

   *              Y/N
3687
```

[↓]

```
DOOR LOCK ON
MOTOR ON
EXIT
```
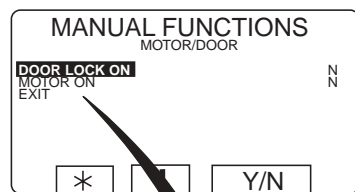
Press [↓] as required to select a function.
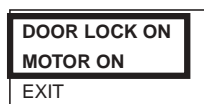
A toggle function:

[Y/N] **Use Y/N to toggle the function from ON (Yes) to OFF (No).**

When you have finished:

[↓] **Press [↓] to highlight "EXIT".**

```
DOOR LOCK ON
MOTOR ON
EXIT
```
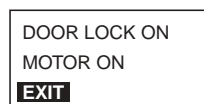
[SELECT] **Press SELECT.**

Lock the door and start the motor

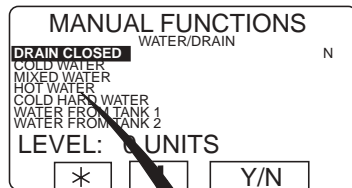**DOOR LOCK ON**
If you answer **Yes (Y)**:

 The door will be locked. Note that you must always lock the door before you can operate the machine manually.

MOTOR ON
 If you answer **Yes (Y)**:

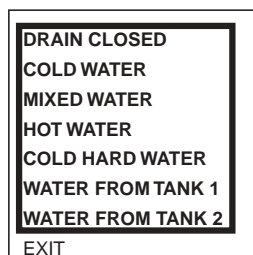 The motor will start and operate, using normal action.

Water/drain

```
MANUAL FUNCTIONS
        WATER/DRAIN              N
DRAIN CLOSED
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
LEVEL:    UNITS
   ✳             Y/N
```
3688

To access this function, see instructions in section "To select manual operation".

⬇

⬆

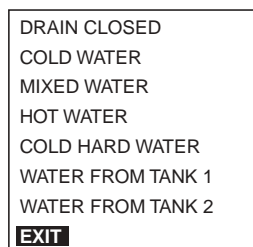Use ⬇ or ⬆ to select **Drain or one of the six Water filling alternatives.**

```
DRAIN CLOSED
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
EXIT
```

Drain (a toggle function) :
Press Y/N to toggle the function from Yes (Y) and No (N).

Y/N

Water filling:
Press OPEN.
The function will be activated for as long as you press and hold this key. The function ceases as soon as you release the key.
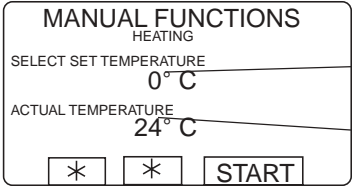
OPEN

⬇

When you have finished:

Press ⬇ to highlight "EXIT".

```
DRAIN CLOSED
COLD WATER
MIXED WATER
HOT WATER
COLD HARD WATER
WATER FROM TANK 1
WATER FROM TANK 2
EXIT
```

SELECT   **Press SELECT.**

Procedure for use

Heating

```
MANUAL FUNCTIONS
        HEATING
SELECT SET TEMPERATURE
           0° C
ACTUAL TEMPERATURE
          24° C
  [ * ] [ * ] [ START ]
```
3689

To access this function, see instructions in section "To select manual operation".

Temperature selected
Actual temperature

1 2 3
4 5 6
7 8 9
0

Use the numeric keys to enter the temperature the water is to be heated to.

START

Press START.
Heating will now begin.

STOP

If you wish, you can cancel heating before the set temperature is reached:
**Access this function again and press STOP.**
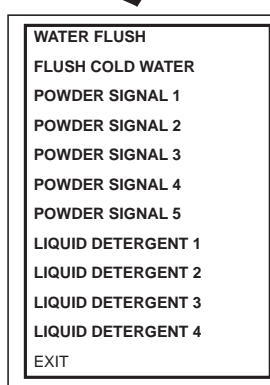
Detergent signals and water flushing

```
MANUAL FUNCTIONS
      DETERGENT/FLUSH
WATER FLUSH
FLUSH COLD POWDER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4

  ✳      ↓    OPEN
```
3684
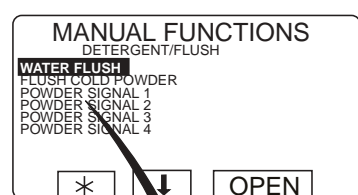
To access this function, see instructions in section "To select manual operation".

↓
↑

Use ↓ and ↑ to **select the function you require.**

```
WATER FLUSH
FLUSH COLD WATER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4
POWDER SIGNAL 5
LIQUID DETERGENT 1
LIQUID DETERGENT 2
LIQUID DETERGENT 3
LIQUID DETERGENT 4
EXIT
```

Detergent signals and water flushing

FLUSH WATER:
This function uses water to clear detergent from the supply tubes of the detergent dispensing system.

POWDER SIGNAL:
This function will either: a) use water to dispense detergent from machine compartments, or: b) dispense detergent from an external system. The number of valves present will vary according to the machine type.

OPEN
↓

Press OPEN.
The function will be activated for as long as you press and hold this key. The function ceases as soon as you release the key.

When you have finished:

Press ↓ repeatedly to highlight "EXIT".

```
WATER FLUSH
FLUSH COLD POWDER
POWDER SIGNAL 1
POWDER SIGNAL 2
POWDER SIGNAL 3
POWDER SIGNAL 4
POWDER SIGNAL 5
LIQUID DETERGENT 1
LIQUID DETERGENT 2
LIQUID DETERGENT 3
LIQUID DETERGENT 4
EXIT
```

SELECT **Press SELECT.**

Statistics

To select Statistics

RUN A WASH PROGRAM
OPTIONS MENU
MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG: 000,0

＊ ↓ SELECT

3589

If this menu is not currently displayed:

Press ⏎ repeatedly.

↓ **Press ↓ to highlight "GO TO THE MENU".**

RUN A WASH PROGRAM
OPTIONS MENU

SELECT **Press SELECT.**

▯▯▯ MENU ▯▯▯
MAKE A CHOICE:

WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
STATISTICS
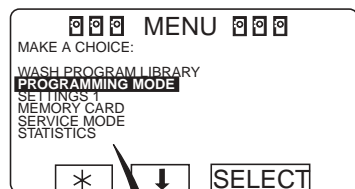
＊ ↓ SELECT

3691

↓ **Press ↓ five times...**

WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
STATISTICS
MANUAL MODE
SETTINGS 2
EXIT

...to highlight "STATISTICS".

SELECT **Press SELECT.**

```
              STATISTICS
TOTAL RUN TIME HOURS                    0
TOTAL TRIP RUN TIME HOURS               0
HOURS SINCE LAST SERVICE                0

LAST 5 ERROR CODES      PROGRAM   HOURS
08 NO HEATING              991        0
08 NO HEATING              996        0
08 NO HEATING              993        0
08 NO HEATING              991        0
08 NO HEATING              991        0

   [✳]      [↓]        EXIT
```
3690

To display the next page of statistics:

Press [↓].

```
              STATISTICS
PROGRAM   WASHES   PROGRAM   WASHES
   2        4        10        0
  12       52         0        0
  78        0       123        0
 991       35       992        3
 993        1       994        0
 995        0       996        0
 997        0       998        0
 999        0

   [✳]      [✳]        EXIT
```
3958

To display the next page of statistics:

Press [↓].

```
              STATISTICS
PROGRAM   WASHES   PROGRAM   WASHES
 S  1        0      S  2        0
 S  5        0      S  6        0
 S 80        0      S 90        0
 S 99        0      S991        0
 S992        0      S993        0
 S994        0      S995        0
 S996        0      S997        0
 S998        0      S999        0

   [↑]      [✳]        EXIT
```
4040

If a memory card is in place in the PCU, the memory card program statistics will be displayed. An "S" before the program number shows that it is a memory card program.

[EXIT]

When you want to cancel the display of statistics:

Press EXIT.

The Statistics function

The Statistics function gives you access to the following information:

TOTAL RUN TIME HOURS:

Shows the total operating time for the machine since it was installed.

TOTAL TRIP RUN TIME HOURS:

This register records the total number of operating hours since it was last reset. It can, for example, be used to keep track of operating time since the last machine service. The procedure for resetting it is described in **section "To reset "Total trip run time hours" to zero"**.

HOURS SINCE LAST SERVICE

This register shows the time elapsed since the last service. The register can also be used to generate a signal on the display to show when service is needed (see the section "Settings 1" in the service manual).

LAST 5 ERROR CODES:

This displays the most recent error codes, and tells which program was operating at the time and during which hour (according to the "total run time" record) the error code was flagged.

NO. OF TIMES EACH PROGRAM USED:

Displays statistics for PCU programs and for programs on any memory card currently in place in the PCU.

Procedure for use

Resetting statistic registers

RUN A WASH PROGRAM
OPTIONS MENU
MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG: 000,0

| ✳ | ↓ | SELECT |

3589

If this menu is not currently displayed:
Press ↩ repeatedly.

↓

Press ↓ to highlight "GO TO THE MENU".
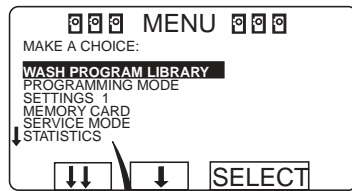
RUN A WASH PROGRAM
OPTIONS MENU

SELECT **Press SELECT.**

Statistics registers which can be reset to zero

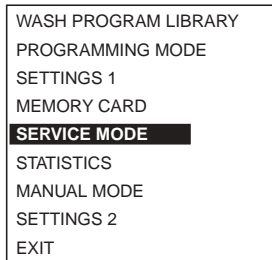The following registers in the statistics function can be cleared (reset to zero):

• Total trip run time hours.

• Hours since last service.

• No. of times each program used (PCU programs).

• No. of times each program used (programs on any memory card currently in the PCU).

▧▧▧ MENU ▧▧▧
MAKE A CHOICE:
WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
↓STATISTICS

⬇⬇ ⬇ SELECT

3693

⬇ Press ⬇ ..four times....

WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
STATISTICS
MANUAL MODE
SETTINGS 2
EXIT

... to highlight "SERVICE PROGRAM".

SELECT Press SELECT

⚠ ⚠

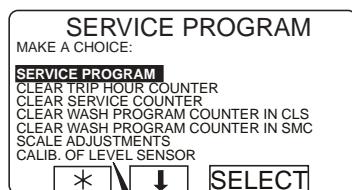**The service program may only be used by authorised personnel, because most safety interlocks are disabled.**

Prevention of unauthorised access

A button on the CPU circuit board has to be pressed to gain access to the service program, to prevent its unauthorised or inadvertent use. The CPU circuit board is located behind the control panel.
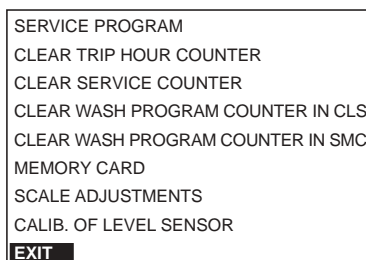
PRESS BUTTON
ON CPU BOARD

✳ ✳ EXIT

4209

Press the button on the CPU circuit board.

SERVICE PROGRAM
MAKE A CHOICE:
SERVICE PROGRAM
CLEAR TRIP HOUR COUNTER
CLEAR SERVICE COUNTER
CLEAR WASH PROGRAM COUNTER IN CLS
CLEAR WASH PROGRAM COUNTER IN SMC
SCALE ADJUSTMENTS
CALIB. OF LEVEL SENSOR

✳ ⬇ SELECT

4042 A

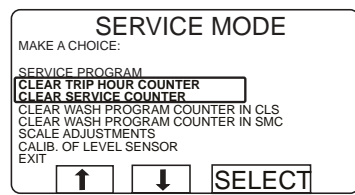Now you can choose either to clear/reset a register or to adjust the weighing equipment.

⬇ Press ⬇ to highlight the option you want, then press SELECT.

SELECT

⬇ If you want to exit:

Press ⬇ repeatedly until EXIT is highlighted.

SERVICE PROGRAM
CLEAR TRIP HOUR COUNTER
CLEAR SERVICE COUNTER
CLEAR WASH PROGRAM COUNTER IN CLS
CLEAR WASH PROGRAM COUNTER IN SMC
MEMORY CARD
SCALE ADJUSTMENTS
CALIB. OF LEVEL SENSOR
EXIT

SELECT Press SELECT.

Time counter, hours after last service

```
       SERVICE MODE
MAKE A CHOICE:

SERVICE PROGRAM
CLEAR TRIP HOUR COUNTER
CLEAR SERVICE COUNTER
CLEAR WASH PROGRAM COUNTER IN CLS
CLEAR WASH PROGRAM COUNTER IN SMC
SCALE ADJUSTMENTS
CALIB. OF LEVEL SENSOR
EXIT
   [↑]   [↓]   SELECT
```
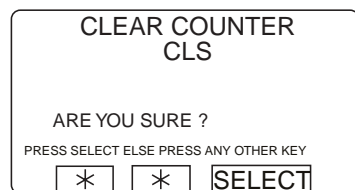4041 A

Both counters can be reset in the same way.

[↓]

SELECT

Press [↓] so that CLEAR TRIP HOUR COUNTER OR CLEAR SERVICE COUNTER will be marked.

Press SELECT.

```
       CLEAR COUNTER
            CLS


      ARE YOU SURE ?
PRESS SELECT ELSE PRESS ANY OTHER KEY
   [✳]   [✳]   SELECT
```
4043 A

First you have a chance to change your mind.

If you **do not want to reset** the register:

Press any key other than SELECT.

If you want to reset the register:

SELECT

Press SELECT.

Number of washes for program in timer or memory card

```
SERVICE MODE
MAKE A CHOICE:

SERVICE PROGRAM
CLEAR TRIP HOUR COUNTER
CLEAR SERVICE COUNTER
CLEAR WASH PROGRAM COUNTER IN CLS
CLEAR WASH PROGRAM COUNTER IN SMC

  ↑     ↓    SELECT
```
4044 A

You can reset program in both timer and the memory card (if inserted).

Press ↓ **so that CLEAR WASH PROGRAM COUNTER IN CLS or CLEAR WASH PROGRAM COUNTER IN SMC will be marked.**

↓

SELECT **Press SELECT.**

```
CLEAR COUNTER
CLS
FROM PROGRAM NUMBER:
        0
TO PROGRAM NUMBER:
        0
TO END: TO PROGRAM NUMBER = 0
  ✳     ↓     EXIT
```
4045 A

1 2 3
4 5 6
7 8 9
  0

Write from which program number you want to clear wash programs.

↓ **Press** ↓ .

```
┌─────────────────────────────┐
│      CLEAR COUNTER          │
│           CLS               │
│ FROM PROGRAM NUMBER:        │
│            1                │
│ TO PROGRAM NUMBER:          │
│            0                │
│ TO END: TO PROGRAM NUMBER = 0│
│  ┌───┐ ┌───┐ ┌──────┐      │
│  │ ✳ │ │ ↓ │ │ EXIT │      │
│  └───┘ └───┘ └──────┘      │
└─────────────────────────────┘
4046 A
```

Enter digits corresponding to the program number (inclusive) up to which you wish to clear the total counter.

1 2 3
4 5 6
7 8 9
0

ERASE Press **ERASE**.

```
┌─────────────────────────────┐
│      CLEAR COUNTER          │
│           CLS               │
│                             │
│   ARE YOU SURE ?            │
│ PRESS SELECT ELSE PRESS ANY OTHER KEY │
│  ┌───┐ ┌───┐ ┌────────┐    │
│  │ ✳ │ │ ✳ │ │ SELECT │    │
│  └───┘ └───┘ └────────┘    │
└─────────────────────────────┘
4043 A
```

First you have the chance to change your mind.

If you **do not want to** reset the register:
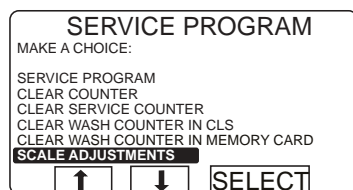**Press any key other than SELECT**.

If you do want to reset the register:

SELECT Press **SELECT**.

**For machines with weighing equipment installed only!**

Scale adjustments

```
┌─────────────────────────────────────┐
│         SERVICE PROGRAM             │
│ MAKE A CHOICE:                      │
│                                     │
│ SERVICE PROGRAM                     │
│ CLEAR COUNTER                       │
│ CLEAR SERVICE COUNTER               │
│ CLEAR WASH COUNTER IN CLS           │
│ CLEAR WASH COUNTER IN MEMORY CARD   │
│ ▌SCALE ADJUSTMENTS▐                  │
│  ┌───┐  ┌───┐  ┌──────────┐         │
│  │ ↑ │  │ ↓ │  │  SELECT  │         │
│  └───┘  └───┘  └──────────┘         │
└─────────────────────────────────────┘
```
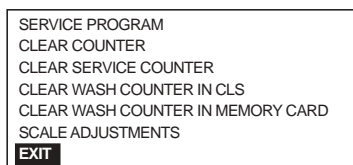4777 A

┌───┐
│ ↓ │ **Press ↓ repeatedly**
└───┘ **until SCALE ADJUST-**
       MENTS is highlighted.

┌──────────┐
│ SELECT │ **Press SELECT.**
└──────────┘

┌───┐
│ ↓ │ **When you have finished:**
└───┘ **Press ↓ repeatedly**
       until EXIT is highlighted.

```
┌─────────────────────────────────────┐
│ SERVICE PROGRAM                     │
│ CLEAR COUNTER                       │
│ CLEAR SERVICE COUNTER               │
│ CLEAR WASH COUNTER IN CLS           │
│ CLEAR WASH COUNTER IN MEMORY CARD   │
│ SCALE ADJUSTMENTS                   │
│ ▌EXIT▐                               │
└─────────────────────────────────────┘
```

┌──────────┐
│ SELECT │ **Press SELECT.**
└──────────┘

Scale adjustments

The following functions are accessed via the SCALE ADJUSTMENTS menu:

Reset scale to zero (see section ″Reset scale to zero″)

Used to make the weighing equipment display 0 when the machine has no load in it.

Reset tare to zero (see section ″Reset tare to zero″)

Used to clear a stored tare parameter.

Tare scale (see section ″Tare scale″)

Used to reset the weighing equipment so that a weight such as a container will not be included when calculating net weight.

Set tare to a certain value (see section ″Set tare to a certain value″)

Used to enter a value for the tare parameter, a weight in hectograms.

Read tare value (see section ″Read tare value″)

Used to check the value currently stored as the tare parameter.

Calibrate the scale (see section ″Calibrate the scale″)

This function is used only on installation of a new scale unit.

Zero calibration (see section ″Zero calibration″)

Used to increase the accuracy of the weighing equipment.

Read version number (see section ″Read version number″)

This is where you find the version number of the weighing equipment.

If the weighing equipment is not connected, the error message "WEIGHING EQUIPMENT NOT CONNECTED" will be displayed. Connect the weighing equipment and try again. If necessary, see the section "Fault-finding, weighing equipment" in the machine manual.

Procedure for use

For machines with weighing equipment installed only!

Reset scale to zero

```
SERVICE PROGRAM
MAKE A CHOICE:

RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE

  ↑        ↓      SELECT
```
4778

```
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
ZERO CALIBRATION
READ VERSION NUMBER
EXIT
```

Check that "RESET SCALE TO ZERO" is highlighted.

If it isn't...

↓   **Press ↑ or ↓ as required to highlight "RESET SCALE TO ZERO".**

↑

SELECT   **Press SELECT.**

```
SCALE ADJUSTMENTS

RESET SCALE TO ZERO

DONE!
PRESS SELECT

  ✳        ✳      SELECT
```
4779

This screen shows that the weighing equipment has been reset to zero.

SELECT   **Press SELECT.**

Reset scale to zero

"Reset weighing equipment" is used to make the weighing equipment display 0 when the machine has no load in it.

If your attempt to reset the weighing equipment fails at this point, you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display. For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.

Please note:

The machine must be unladen when you use this function, i.e. no water or wash load in the drum.

Please note:

After a power-cut, the weighing equipment will always display 0, no matter what the actual load in the drum. In this event you will have to use the "Reset scale to zero" function.

For machines with weighing equipment installed only!

Reset tare to zero

```
SERVICE PROGRAM
MAKE A CHOICE:

RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE

   ↑        ↓      SELECT
```
4780

Reset tare to zero

If your attempt to clear the tare parameter fails at this point, you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display. For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.

↓   Press ↓ once to highlight "RESET TARE TO ZERO".

```
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
ZERO CALIBRATION
READ VERSION NUMBER
EXIT
```

SELECT   Press SELECT.

```
SCALE ADJUSTMENTS

RESET TARE TO ZERO

DONE!
PRESS SELECT

  *     *    SELECT
```
4781

This screen shows that the stored tare parameter has been cleared.

SELECT   Press SELECT.

Procedure for use

For machines with weighing equipment installed only!

Tare scale

```
SERVICE PROGRAM
MAKE A CHOICE:
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
          ↑           SELECT
```
4782

⬇ **Press ⬇ twice to highlight "TARE SCALE".**

```
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
ZERO CALIBRATION
READ VERSION NUMBER
EXIT
```

SELECT **Press SELECT.**

```
SCALE ADJUSTMENTS
        TARE SCALE
        DONE!
     PRESS SELECT
   *     *    SELECT
```
4783

SELECT **Press SELECT.**

Tare scale

This function involves first loading the drum with, for example, a container, then taring (resetting) the weighing equipment so that the weight of the container will not be included when calculating net weight.

If your attempt to tare the weighing equipment fails at this point, you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display. For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.

This screen shows that the weighing equipment has been tared successfully.

For machines with weighing equipment installed only!

Set tare to a certain value

```
  SERVICE PROGRAM
  MAKE A CHOICE:
  RESET SCALE TO ZERO
  RESET TARE TO ZERO
  TARE SCALE
  SET TARE TO A CERTAIN VALUE
  READ TARE VALUE
  CALIBRATE THE SCALE
  [ ↑ ]   [ ↓ ]   SELECT
4784
```

┌── *Set tare to a certain value* ──┐
This function lets you enter a value for the tare parameter, i.e. a weight value which the weighing equipment will disregard when showing a net weight on the display. The function will automatically clear any earlier tare value when you enter a new one.

If your value is not entered successfully at this point, you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display. For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.
└─────────────────────────────┘

[↓]   **Press [↓] three times to highlight "SET TARE TO A CERTAIN VALUE"**

```
  RESET SCALE TO ZERO
  RESET TARE TO ZERO
  TARE SCALE
  SET TARE TO A CERTAIN VALUE
  READ TARE VALUE
  CALIBRATE THE SCALE
  ZERO CALIBRATION
  READ VERSION NUMBER
  EXIT
```

SELECT   **Press SELECT.**

```
  SCALE ADJUSTMENTS
  SET TARE TO A CERTAIN VALUE
  ENTER TARE IN HG AND
      PRESS SELECT
  [ * ]   [ * ]   SELECT
4785
```

[1] [2] [3]
[4] [5] [6]
[7] [8] [9]
    [0]

Use the numeric keys to enter the tare you require, unit: hectograms; 1 hectogram = 100 grams).

SELECT   **Press SELECT.**

```
  SCALE ADJUSTMENTS
  SET TARE TO A CERTAIN VALUE
      DONE!
  PRESS SELECT
  [ * ]   [ * ]   SELECT
4786
```

This screen shows that the parameter has been entered successfully.

SELECT   **Press SELECT.**

For machines with weighing equipment installed only!

Read tare value

```
SERVICE PROGRAM
MAKE A CHOICE:
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
   ↑       ↓    SELECT
```
4787

┌─────────────────────────────┐
│ **Read tare value** │
│ This function lets you check the value currently stored │
│ as the tare parameter. │
└─────────────────────────────┘

↓   **Press ↓ four times to highlight "READ TARE VALUE".**

```
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
ZERO CALIBRATION
READ VERSION NUMBER
EXIT
```

SELECT   **Press SELECT.**

```
SCALE ADJUSTMENTS
   READ TARE VALUE

     10 HG

   ✳     ✳    SELECT
```
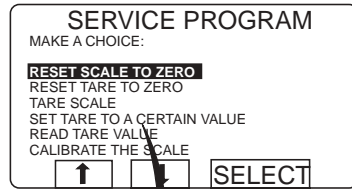4788

This screen shows the stored tare parameter (unit: hectograms (1 hectogram = 100 grams).

SELECT   **Press SELECT.**
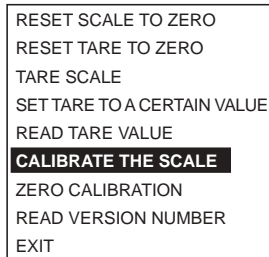
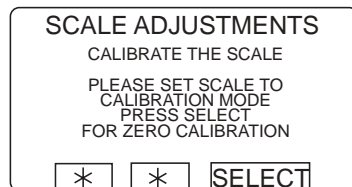**For machines with weighing equipment installed only!**

Calibrate the scale

```
SERVICE PROGRAM
MAKE A CHOICE:
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
  ↑        ↓      SELECT
```
4789

↓ **Press ↓ five times to highlight "CALIBRATE THE SCALE".**

```
RESET SCALE TO ZERO
RESET TARE TO ZERO
TARE SCALE
SET TARE TO A CERTAIN VALUE
READ TARE VALUE
CALIBRATE THE SCALE
ZERO CALIBRATION
READ VERSION NUMBER
EXIT
```

SELECT **Press SELECT.**

```
SCALE ADJUSTMENTS
CALIBRATE THE SCALE
PLEASE SET SCALE TO
CALIBRATION MODE
PRESS SELECT
FOR ZERO CALIBRATION
  ✳        ✳      SELECT
```
4790

Set the calibration switch to calibration mode.

SELECT **Press SELECT.**

```
SCALE ADJUSTMENTS
CALIBRATE THE SCALE
DONE!
PRESS SELECT
  ✳        ✳      SELECT
```
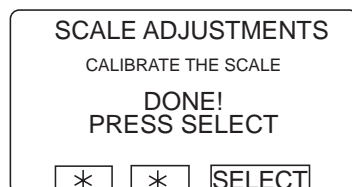4791

SELECT **Press SELECT.**

Please note:

This function is used only on installation of a new scale unit.
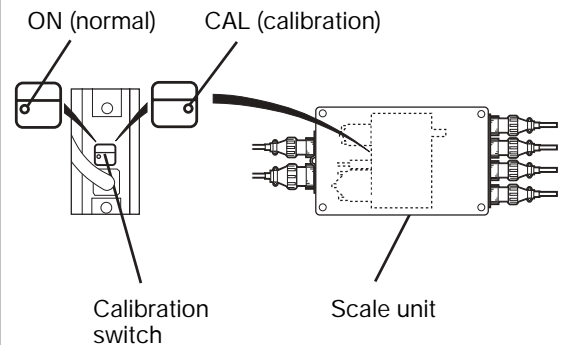
Calibrate the scale

If this calibration has not succeeded you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display. For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.

Please note:

The machine must be unladen at the start of calibration, i.e. no water or wash load in the drum.

Calibration mode/normal mode

To gain access to the calibration switch in the scale unit, the top panel has to be taken off. Remove the four screws on the scale unit cover. Then the calibration switch can be switched between normal mode "ON" and calibration mode "CAL".

ON (normal)   CAL (calibration)

Calibration switch   Scale unit

4758 A

Procedure for use

For machines with weighing equipment installed only!

```
SCALE ADJUSTMENTS

CALIBRATE THE SCALE
FILL DRUM WITH CALIBRATION WEIGHT
ENTER WEIGHT IN HG AND
PRESS SELECT

  ✳      ✳     SELECT
```
4792

Put the calibration weight in the drum.

1 2 3
4 5 6
7 8 9
0

Use the numeric keys to enter the calibration weight in hg (1 hg = 100 grams).

SELECT   **Press SELECT.**

```
SCALE ADJUSTMENTS

CALIBRATE THE SCALE
DONE!
PRESS SELECT

  ✳      ✳     SELECT
```
4791

SELECT   **Press SELECT.**

```
SCALE ADJUSTMENTS

CALIBRATE THE SCALE
REMOVE WEIGHT AND PRESS SELECT

  ✳      ✳     SELECT
```
4793

Remove the calibration weight.

SELECT   **Press SELECT.**

```
SCALE ADJUSTMENTS

CALIBRATE THE SCALE
PRESS SELECT FOR ZERO CALIBRATION

  ✳      ✳     SELECT
```
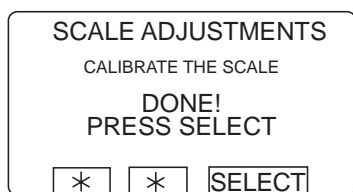4794

If you want to use the "Calibrate zero" function now:

SELECT   **Press SELECT.**

For machines with weighing equipment installed only!

```
SCALE ADJUSTMENTS
CALIBRATE THE SCALE
DONE!
PRESS SELECT

 *    *   SELECT
```
4791

SELECT Press **SELECT**.

Calibration mode/normal mode

To gain access to the calibration switch in the scale unit, the top panel has to be taken off. Remove the four screws on the scale unit cover. Then the calibration switch can be switched between normal mode "ON" and calibration mode "CAL".

ON (normal)   CAL (calibration)

```
SCALE ADJUSTMENTS
CALIBRATE THE SCALE
RESET SCALE FROM CALIBRATION
MODE AND PRESS SELECT

 *    *   SELECT
```
4795
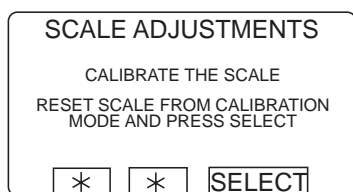
Restore the calibration switch to normal mode.

SELECT Press **SELECT**.

Calibration switch   Scale unit

4758 A
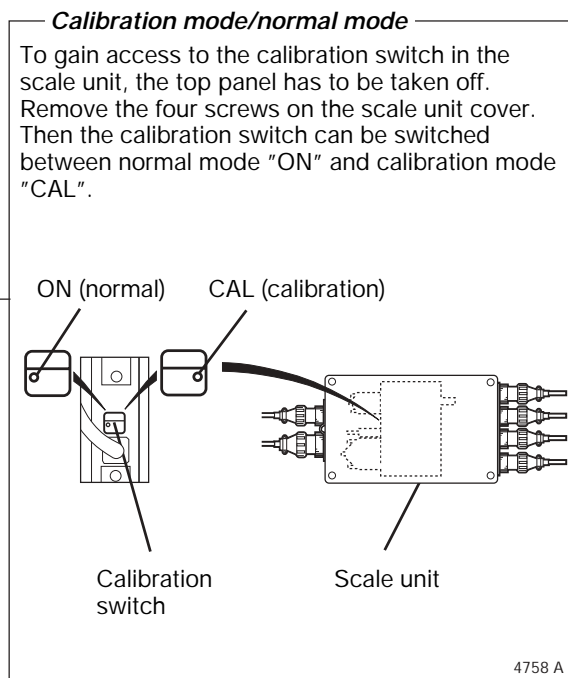
For machines with weighing equipment installed only!

Zero calibration

```
┌─────────────────────────────────┐
│        SERVICE PROGRAM          │
│  MAKE A CHOICE:                 │
│  ▌RESET SCALE TO ZERO▐          │
│  RESET TARE TO ZERO             │
│  TARE SCALE                     │
│  SET TARE TO A CERTAIN VALUE    │
│  READ TARE VALUE                │
│  CALIBRATE THE SCALE            │
│  [↑]   [ ]   SELECT             │
└─────────────────────────────────┘
4796
```

[↓] **Press** [↓] **six times to highlight "ZERO CALIBRATION".**

```
┌─────────────────────────────────┐
│  RESET SCALE TO ZERO            │
│  RESET TARE TO ZERO             │
│  TARE SCALE                     │
│  SET TARE TO A CERTAIN VALUE    │
│  READ TARE VALUE                │
│  CALIBRATE THE SCALE            │
│  ▌ZERO CALIBRATION▐             │
│  READ VERSION NUMBER            │
│  EXIT                           │
└─────────────────────────────────┘
```

SELECT   **Press SELECT.**

```
┌─────────────────────────────────┐
│      SCALE ADJUSTMENTS          │
│                                 │
│       ZERO CALIBRATION          │
│     PRESS SELECT FOR            │
│     ZERO CALIBRATION            │
│   [✳]   [✳]   SELECT            │
└─────────────────────────────────┘
4797
```

If you wish to calibrate zero for the weighing equipment:

SELECT   **Press SELECT.**

```
┌─────────────────────────────────┐
│      SCALE ADJUSTMENTS          │
│       ZERO CALIBRATION          │
│                                 │
│          DONE!                  │
│       PRESS SELECT              │
│   [✳]   [✳]   SELECT            │
└─────────────────────────────────┘
4798
```

This screen shows you have calibrated zero.

SELECT   **Press SELECT.**

Zero calibration

The "Zero calibration" function is used to increase the accuracy of the weighing equipment. This should be done once a month.

If this calibration has not succeeded you will see an error message equivalent to: "FAILED. PRESS SELECT" on the display.

For troubleshooting, see the section "Fault-finding, weighing equipment" in the machine manual.

Please note:

The machine must be unladen during this calibration, i.e. no water or wash load in the drum.

For machines with weighing equipment installed only!

Read version number

```
 SERVICE PROGRAM
 MAKE A CHOICE:

 RESET SCALE TO ZERO
 RESET TARE TO ZERO
 TARE SCALE
 SET TARE TO A CERTAIN VALUE
 READ TARE VALUE
 CALIBRATE THE SCALE
  ⬆       ⬇    SELECT
```
4799

⬇ **Press ⬇ seven times to highlight "READ VERSION NUMBER".**

```
 RESET SCALE TO ZERO

 RESET TARE TO ZERO

 TARE SCALE

 SET TARE TO A CERTAIN VALUE

 READ TARE VALUE

 CALIBRATE THE SCALE

 ZERO CALIBRATION

 READ VERSION NUMBER

 EXIT
```

SELECT **Press SELECT.**

```
 SCALE ADJUSTMENTS

   READ VERSION NUMBER

 STATHMOS AB 3050 REV 00521

   ✳     ✳    SELECT
```
4800

SELECT **Press SELECT.**

The screen shows the version number.

Read version number

In the event of a fault in the weighing equipment (which cannot be put right with the aid of the section "Fault-finding, weighing equipment" in the machine manual), make a note of the version number accessed via this function before you contact the supplier's service department.

Memory card

## General introduction
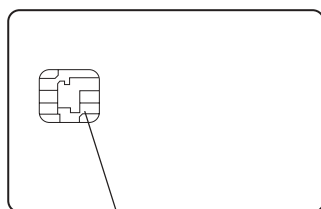
3605

Memory chip

A memory card is a plastic card, the size of a credit card, with an electronic memory chip inside it. This memory card is capable of storing 10 to 15 wash programs of normal size. If the programs are mostly small ones, more of them can be stored, whereas larger programs will reduce the number which can be held by the memory card. Memory cards of this type can be used to:

- transfer wash programs from one machine to another

- run wash programs straight from the memory card

- transfer wash programs from a PC to a memory card and from a memory card to a PC (these procedures, and how to write a wash program on a PC, are described elsewhere)
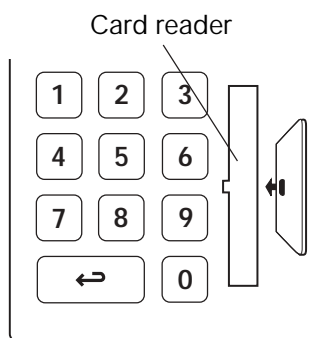
A program stored on a memory card may be given restricted-use status. This means that:

- The program cannot be deleted or copied to the program control unit of a washer extractor.

- You cannot alter the program or inspect the way it is written.

- To run the program you have to have the memory card and to insert it into the program control unit when the program is to be started.

To select the "Memory card" function

Memory
chip

3606
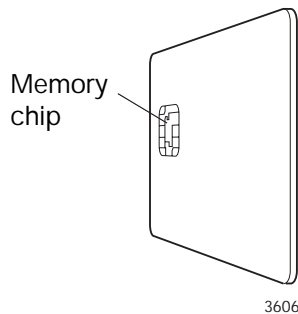
Turn the memory card so its memory chip is at the far end, and on the left of the card...

Card reader

1	2	3
4	5	6
7	8	9
↩	0

4115

...then insert the memory card into the program control unit.

RUN A WASH PROGRAM
OPTIONS MENU

MAKE YOUR CHOICE WITH
↑ OR ↓ AND PRESS SELECT
WEIGHT, KG: 000,0

| ✻ | ↓ | SELECT |

3589

If this menu is not currently displayed:
Press ↩ repeatedly.

RUN A WASH PROGRAM
OPTIONS MENU

Press ↓ to highlight "GO TO THE MENU".

SELECT **Press SELECT.**

```
☐☐☐  MENU  ☐☐☐
MAKE A CHOICE:
WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
STATISTICS
  ✳      ↓     SELECT
```
3596

↓   **Press ↓ three times...**

↓

↓

```
WASH PROGRAM LIBRARY
PROGRAMMING MODE
SETTINGS 1
MEMORY CARD
SERVICE MODE
STATISTICS
MANUAL MODE
SETTINGS 2
EXIT
```
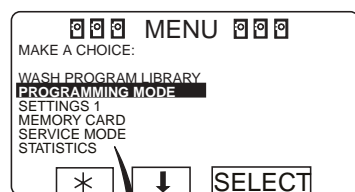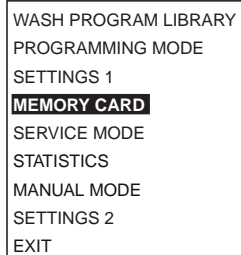
...to highlight ″MEMORY CARD″.

SELECT   **Press SELECT.**

```
        MEMORY CARD

EXECUTE WASH PROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT

  [ ✳ ]  [ ↓ ]   SELECT
```

3597˙A

```
EXECUTE WASH PROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
```

[↑] [↓]   **Select the** function **required using the cursor keys.**

SELECT   **Press SELECT.**

"The "Memory card" functions

Run wash program straight from memory card (see section "To run a wash program straight from a memory card")

A wash program can be run from the memory card, without first being copied to the washer extractor. The memory card may be removed from the card reader after the program has started.

Programs on memory cards may have "restricted-use" status, which means that they can only be run straight from the memory card, not copied or modified.

Copy program from memory card to PCS (see section "To copy a program from a memory card to the machine´s program control unit")

One or more wash programs can be copied from the memory card to the memory chip in the machine's program control unit. Note that programs on the memory card with "restricted-use" status cannot be copied to the machine memory chip.

Copy program from PCS to memory card (see section "To copy a program from the program control unit to a memory card")

One or more wash programs can be copied from the memory chip in the machine's program control unit to the memory card. The memory card can hold 10 to 15 wash programs of normal size.

Delete program on memory card (see section "To delete a program on a memory card")

Clear memory card (see section "To delete all programs on a memory card")

To run a wash program straight from a memory card

```
MEMORY CARD

EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD

  ✳      ↓      SELECT
3598 A
```
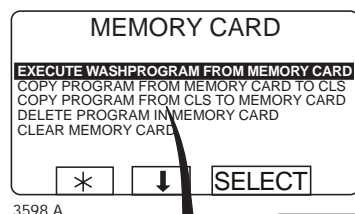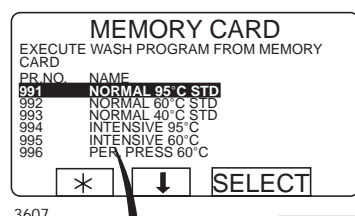
To access this menu, follow the instructions in section "To select the "Memory card" function".

Highlight "EXECUTE WASH PROGRAM FROM MEMORY CARD" (press ↑ if necessary).

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
```

SELECT   **Press SELECT.**

```
MEMORY CARD
EXECUTE WASH PROGRAM FROM MEMORY
CARD
PR NO.   NAME
991      NORMAL 95°C STD
992      NORMAL 60°C STD
993      NORMAL 40°C STD
994      INTENSIVE 95°C
995      INTENSIVE 60°C
996      PER. PRESS 60°C

  ✳      ↓      SELECT
3607
```

↓   **If necessary, use ↓ to...**

```
991    NORMAL 95°C STD
992    NORMAL 60°C STD
993    NORMAL 40°C STD
994    INTENSIVE 95°C
995    INTENSIVE 60°C
996    PER.PRESS 60°C
```

... highlight the wash program required.

SELECT   **Press SELECT.**

```
RUN A WASH PROGRAM
PROGRAM NUMBER AND START DELAY SELECTED:

994          00:00
INTENSIVE 95 °C
   TEXT      START
3608
```
Program name

If you want to see the description of the program (where available):
**Press TEXT.**

TEXT

To start the program:
Press START.

START

Once the program has started, the memory card may be removed from the card reader.

To run a program from the memory card

In broad terms, the program control unit has two different memories. One is a "**program memory**" where all its wash programs are stored, the other is an "**operating memory**", which is used to hold the program currently in use. The program control unit takes the instructions it needs to run the program from the operating memory.

When a wash program is started, the correct program is retrieved from the program memory and copied into the operating memory.
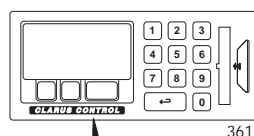

```
3617

Program memory program control unit
991    NORMAL 95°C STD
992    NORMAL 60°C STD
993    NORMAL 40°C STD
994    INTENSIVE 95°C
995    INTENSEIVE 95°C
996    PERM. PRESS 60°C
997    PERM. PRESS 40°C
998    LOW EXTRACT 1 MIN
999    HIGH EXTRACT 5 MIN

Operating memory program control unit
997    PERM. PRESS 40°C
```
Program currently being used

A parallel process takes place when a program is started from a memory card. In other words, the program is copied from the memory card into the operating memory, and the machine runs the program entirely from the set of instructions in the operating memory.


```
3618

Program memory card
1    MY OWN 40 °C
2    MY OWN 60 °C
3    MY OWN 90 °C
4    MY OWN WOOL 30 °C
5    MY OWN INTENSIVE

Program memory program control unit
991    NORMAL 95°C STD
992    NORMAL 60°C STD
993    NORMAL 40°C STD
994    INTENSIVE 95°
995    INTENSIVE 60°C
996    PERM.PRESS 60°C
997    PERM.PRESS 40°C
998    LOW EXTRACT 1 MIN
999    HIGH EXTRACT 5 MIN

Operating memory program control unit
4    MY OWN WOOL 30 °C
```
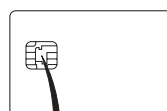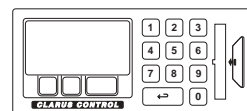
That is why you may remove the memory card from the card reader once the program has started.

Once the program has ended it is erased from the operating memory.

To copy a program from a memory card to the machine's program control unit

```
        MEMORY CARD
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
   [ * ]  [ ↓ ]   SELECT
3609 A
```

[↑]
[↓]

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
```

SELECT

```
        MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
PR.NO.   NAME
1        MY OWN 40 °C
2        MY OWN 60 °C
3        MY OWN 90 °C
4        MY OWN WOOL 30 °C
5        MY OWN INTENSIVE
   [ * ]  [ ↓ ]   SELECT
3610 A
```

[↓]

```
1     MY OWN 40 °C
2     MY OWN 60 °C
3     MY OWN 90 °C
4     MY OWN WOOL 30 °C
5     MY OWN INTENSIVE
```

SELECT

To access this menu, follow the instructions in section "To select the "Memory card" function".

Note that restricted-use programs on a memory card cannot be copied.

Highlight "COPY PROGRAM FROM MEMORY CARD TO CLS" (press [↓] or [↑] if necessary).

Press SELECT.
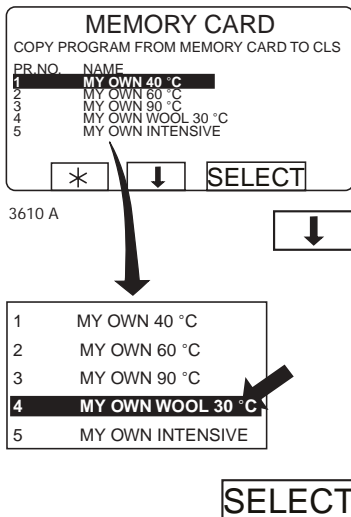
If necessary, use [↓] to...

... highlight the wash program required.

Press SELECT.

What is a restricted-use program?

A wash program which has been created on a PC can be made a "restricted-use" program. This means that:

- The program cannot be deleted or copied to the program memory of a washer extractor.
- You cannot modify the program or examine its structure.
- To run the program you must have access to the memory card, and insert it into the card reader when the program is to be started.

What happens when a program is copied?

Both the memory card and the program control unit have memory chips capable of storing wash programs. The chip on the card can hold about 10 to 15 programs of normal size, while the chip in the program control unit has a capacity of several hundred programs.

```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
```
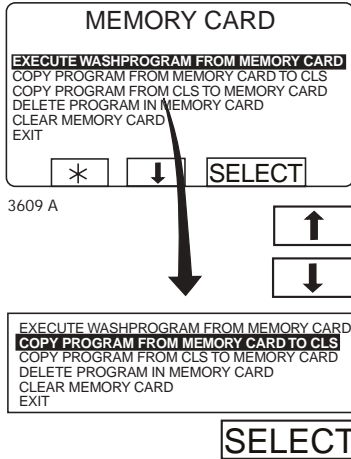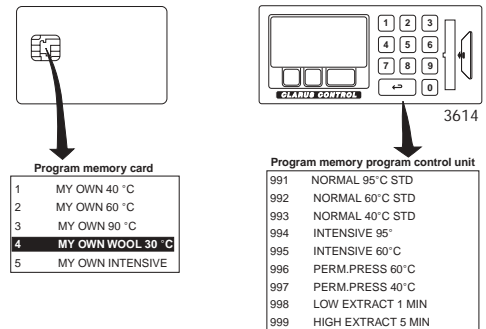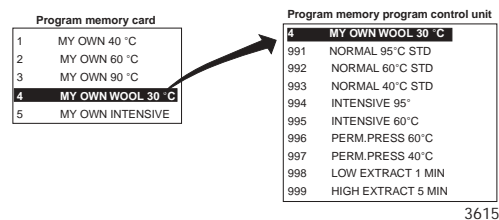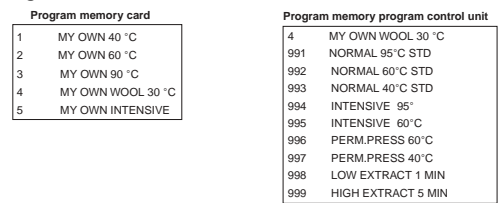
```
Program memory program control unit
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE 95°
995   INTENSIVE 60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   HIGH EXTRACT 5 MIN
```

3614

When a program is copied from a memory card to the machine's program control unit, it is copied, not moved (not deleted from the card). A copy is transferred from the chip on the memory card to the storage chip of the machine program control unit.

```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
```

```
Program memory program control unit
4     MY OWN WOOL 30 °C
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE 95°
995   INTENSIVE 60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   HIGH EXTRACT 5 MIN
```

3615

The program remains on the memory card, but another copy of it has now been stored in the program control unit.

```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
```

```
Program memory program control unit
4     MY OWN WOOL 30 °C
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE  95°
995   INTENSIVE  60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   HIGH EXTRACT 5 MIN
```

3616

```
 ┌─────────────────────────────────┐
 │          MEMORY CARD            │
 │ COPY PROGRAM FROM MEMORY CARD TO CLS │
 │                                 │
 │ NOW YOU CAN CHANGE NUMBER.   123 │
 │                                 │
 │ JUST PRESS SELECT IF NUMBER IS OK │
 │                                 │
 │  [ ✳ ]   [ ↓ ]   [SELECT]       │
 └─────────────────────────────────┘
 3611 A
```

[1] [2] [3]
[4] [5] [6]
[7] [8] [9]
        [0]

SELECT

Choose 1 or 2:

1 If you want to give the program a different program number (from the one it had on the memory card):

   Use the numeric keys to enter the new program number, then press SELECT.

2 If the existing number is suitable:

   Press SELECT.

```
 ┌─────────────────────────────────┐
 │          MEMORY CARD            │
 │ COPY PROGRAM FROM MEMORY CARD TO CLS │
 │ NOW YOU CAN CHANGE NUMBER     00 │
 │                                 │
 │ PROG. NUMBER EXIST! OVERWRITE?  │
 │ PRESS SELECT OR ANY OTHER KEY   │
 │                                 │
 │  [ ✳ ]   [ ↓ ]   [SELECT]       │
 └─────────────────────────────────┘
 4114 A
```

[1] [2] [3]
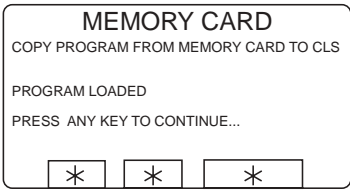[4] [5] [6]
[7] [8] [9]
        [0]

SELECT

If the number you have choosen is already used:

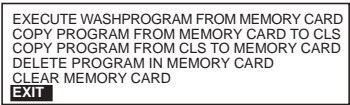1 Select another number.

   Enter the new number and press SELECT.

2 Erase the old program number.

   Press SELECT.

```
┌────────────────────────────────────────┐
│            MEMORY CARD                  │
│ COPY PROGRAM FROM MEMORY CARD TO CLS    │
│                                         │
│ PROGRAM LOADED                          │
│                                         │
│ PRESS  ANY KEY TO CONTINUE...           │
│                                         │
│   ┌─────┐ ┌─────┐  ┌────────┐           │
│   │  ✳  │ │  ✳  │  │   ✳    │           │
│   └─────┘ └─────┘  └────────┘           │
└────────────────────────────────────────┘
```
3612 A

After the program has been copied (it takes only a few seconds) the menu will look like this:

If you want to copy more programs:

Press any key to continue.

```
┌────────────────────────────────────────┐
│ EXECUTE WASHPROGRAM FROM MEMORY CARD    │
│ COPY PROGRAM FROM MEMORY CARD TO CLS    │
│ COPY PROGRAM FROM CLS TO MEMORY CARD    │
│ DELETE PROGRAM IN MEMORY CARD           │
│ CLEAR MEMORY CARD                       │
│ ▐EXIT▌                                  │
│                                         │
└────────────────────────────────────────┘
```
4210 A

When you have finished:

Press ⬇ repeatedly tohighlight "EXIT".

SELECT **Press SELECT.**

To copy a program from the program control unit to a memory card

```
MEMORY CARD
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
   [ * ]   [ ↓ ]   [SELECT]
3619 A
```

[↑]
[↓]

Highlight "COPY PROGRAM FROM CLS TO MEMORY CARD" (press[↓] or [↑] if necessary).

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
```

[SELECT] **Press SELECT.**

```
MEMORY CARD
COPY PROGRAM FROM CLS TO MEMORY CARD
PR NO.   NAME
991   NORMAL 95 °C STD
992   NORMAL 60 °C STD
993   NORMAL 40 °C STD
994   INTENSIVE 95 °C
995   INTENSIVE 60 °C
996   PER. PRESS 60 °C
   [ * ]   [ ↓ ]   [SELECT]
3620 A
```

[↓] **If necessary, use[↓] to...**

```
991   NORMAL 95 °C STD
992   NORMAL 60 °C STD
993   NORMAL 40 °C STD
994   INTENSIVE 95 °C
995   INTENSIVE 60 °C
996   PERM. PRESS 60 °C
997   LOW EXTRACT 1 MIN
998   HIGH EXTRACT 5 MIN
```

... highlight the wash program required.

[SELECT] **Press SELECT.**

What happens when a program is copied?

Both the memory card and the program control unit have memory chips capable of storing wash programs. The chip on the memory card can hold about 10 to 15 programs of normal size, while the chip in the program control unit has a capacity of several hundred programs.


```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
```

```
Program memory program control unit
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE 95°
995   INTENSIVE 60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   HIGH EXTRACT 5 MIN
```

3614

When a program is copied from the machine's program control unit to a memory card, it is copied, not moved (not deleted from the machine). A copy is transferred from the storage chip of the machine program control unit to the chip on the card.

```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
992   NORMAL 60 °C STD
```

```
Program memory program control unit
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE 95°
995   INTENSIVE 60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   LOW EXTRACT 5 MIN
```

3621

The program remains in the program control unit, but another copy of it has now been stored on the card.

```
Program memory card
1   MY OWN 40 °C
2   MY OWN 60 °C
3   MY OWN 90 °C
4   MY OWN WOOL 30 °C
5   MY OWN INTENSIVE
992   NORMAL 60 °C STD
```

```
Program memory program control unit
991   NORMAL 95°C STD
992   NORMAL 60°C STD
993   NORMAL 40°C STD
994   INTENSIVE 95°
995   INTENSIVE 60°C
996   PERM.PRESS 60°C
997   PERM.PRESS 40°C
998   LOW EXTRACT 1 MIN
999   LOW EXTRACT 5 MIN
```

3622

```
    MEMORY CARD
COPY PROGRAM FROM CLS TO MEMORY CARD

NOW YOU CAN CHANGE NUMBER.        998

JUST PRESS SELECT IF NUMBER IS OK

  [ * ]   [ ↓ ]   SELECT
```
3623 A

Choose 1 or 2:

1 If you want to give the program a different program number (from the one it had on the machine):

  Use the numeric keys to enter the new program number, then press SELECT.

2 If the existing number is suitable:

  Press SELECT.

```
    MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
NOW YOU CAN CHANGE NUMBER        00

PROG. NUMBER EXIST! OVERWRITE?
PRESS SELECT OR ANY OTHER KEY

  [ * ]   [ ↓ ]   SELECT
```
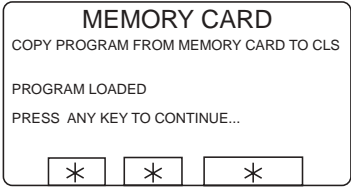4114 A

If the number you have choosen is already used:

1 Select another number.

  Enter the new number and press SELECT.

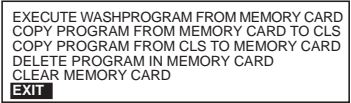2 Erase the old program number.

  Press SELECT.

```
         MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS

PROGRAM LOADED

PRESS  ANY KEY TO CONTINUE...

    [  *  ]  [  *  ]  [    *    ]
```
3612 A

After the program has been copied (it takes only a few seconds) the menu will look like this:

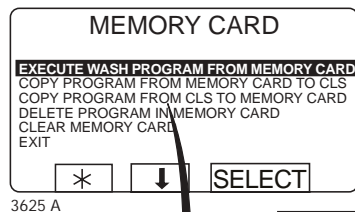If you want to copy more programs:

Press any key to continue.

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
[EXIT]
```
4210 A

When you have finished:

Press [↓] repeatedly to highlight "EXIT".

| SELECT |

Press SELECT.

To delete a program on a memory card

```
        MEMORY CARD

EXECUTE WASH PROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
    ✳      ↓      SELECT
3625 A
```

To access this menu, follow the instructions in section "To select the "Memory card" function

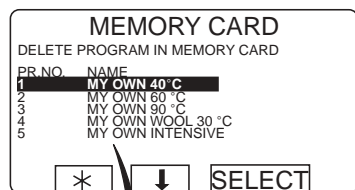**Note that** restricted-use programs on a memory card cannot be deleted.

Highlight "DELETE PROGRAM IN MEMORY CARD" (press ↑ **or** ↓ **if necessary).**

What is a restricted-use program?

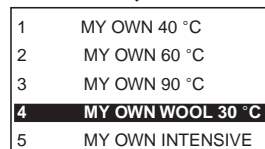A wash program which has been created on a PC can be made a "restricted-use" program. This means that:

• The program cannot be deleted or copied to the program memory of a washer extractor.
• You cannot modify the program or examine its structure.
• To run the program you must have access to the memory card, and insert it into the card reader when the program is to be started.

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
```

SELECT Press SELECT.

```
        MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
PR.NO.   NAME
1        MY OWN 40°C
2        MY OWN 60 °C
3        MY OWN 90 °C
4        MY OWN WOOL 30 °C
5        MY OWN INTENSIVE
    ✳      ↓      SELECT
3626
```

↓ **If necessary, use** ↓ **to...**

```
1    MY OWN 40 °C
2    MY OWN 60 °C
3    MY OWN 90 °C
4    MY OWN WOOL 30 °C
5    MY OWN INTENSIVE
```
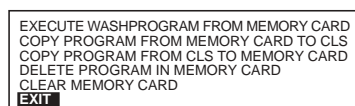
.... highlight the wash program required.

SELECT **Press SELECT.**

The program will now be deleted from the memory card. This takes between 5 and 15 seconds.

If you want to delete more programs:
Continue in the same way as described above.

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
4210 A
```

When you have finished:
Press ↓ **repeatedly to highlight "EXIT".**

SELECT Press SELECT.

To delete all programs on a memory card

```
MEMORY CARD

EXECUTE WASH PROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT

[ * ] [ ↓ ] [SELECT]
```
4519 A

[↑]
[↓]

Note that restricted-use programs on a memory card cannot be copied or deleted.

Highlight "CLEAR MEMORY CARD" (press [↓]
or [↑] **if necessary).**

What is a restricted-use program?

A wash program which has been created on a PC can be made a "restricted-use" program. This means that:

- The program cannot be deleted or copied to the program memory of a washer extractor.
- You cannot modify the program or examine its structure.
- To run the program you must have access to the memory card, and insert it into the card reader when the program is to be started.

```
EXECUTE WASHPROGRAM FROM MEMORY CARD
COPY PROGRAM FROM MEMORY CARD TO CLS
COPY PROGRAM FROM CLS TO MEMORY CARD
DELETE PROGRAM IN MEMORY CARD
CLEAR MEMORY CARD
EXIT
```

[SELECT] **Press SELECT.**

```
MEMORY CARD

CLEAR MEMORY CARD

THIS WILL CLEAR ALL PROGRAMS !!

TO CONTINUE PRESS SELECT.
ELSE PRESS ANY OTHER KEY.

[ ↑ ] [ ↓ ] [SELECT]
```
3629

If you change your mind and do not want to delete the entire memory card:
Press any key other than SELECT.

If you want to delete all programs on the memory card (with the exception of any restricted-use programs):
Press SELECT.

[SELECT]

Maintenance

Daily

- Clean the door seal and remove detergent residue.

- Check that the door does not leak.

- Clean the detergent compartment and wipe down the machine with a damp cloth.

- Check that the drain valve does not leak.

- Start the machine and check that the door remains locked while the machine is operating. Fast forward the machine to the stop position and check that the door cannot be opened until the program is completed.

Every months

- Check that valves, hoses and connections do not leak.

- Remove any textile lint from the drain opening, joints in drain pipes etc.

Intentionally blank

To keep your machine in proper working order, follow the preventive maintenance recommendations provided below.

The maintenance interval should be adjusted according to machine usage. The suggested schedule assumes an 8 hour work day, and a 5 day work week..

Daily

- Check the door and door lock:
  - Open the door and try starting the machine. The machine MUST NOT START.
  - Close the door, start the machine and try opening the door. It MUST NOT BE POSSIBLE TO OPEN THE DOOR WHILE THE MACHINE IS OPERATING!
  - Check that the door does not leak.
  - Clean the door seal, removing any detergent and fluff.
- Check that the drain valve does not leak during the wash cycle.
- Clean out any detergent remaining in the detergent compartment. Rapid advance through a program and let the water rinse the compartment.
- Inspect liquid chemical tubing and connections for leaks. Repair as necessary.

Every third month (refer this service to qualified personnel)

<table>
<tr><td>⚠</td><td>⚠</td></tr>
<tr><td colspan="2">May only be carried out by authorized personnel.</td></tr>
</table>

- Check that the door does not leak.
- Check the drain valve and remove any lint.
- Inspect the interior of the machine (during an actual wash cycle to ensure that no leaks are noticed) by:
  - Turning of the main power switch of the machine.
  - Remove the top cover and the protective front and rear plates.
  - Cover the detergent dispenser to prevent water from splashing inside the machine.
  - Start a wash program.
  - KEEP CLEAR OF MOVING PARTS WHILE MACHINE IS OPERATING!!

- Inspect all internal hoses, seals and gaskets for signs of leakage. Repair as necessary.

- Check that water inlet screens are clean of debris. Dirty screens result in longer fill times, which reduce productivity.

- Inspect the drive belt. Adjust the tension or replace if necessary (see section 30. Motor).

- Check that there are no signs of leakage on the floor beneath the machine. Locate and repair any leak.

- On heated machines, if the heating time is unusually long, check the heating elements (see section 40. Heating). If the water is very hard, check whether there are lime deposits on the heating elements. Decalcify the elements if necessary. Adapt the amount of deliming agent to the manufacturer's guidelines.

- Never switch on the heating elements when there is no water in the machine. This will cause the slow-blow fuse to trigger.

- Inspect the shock absorbers and coil springs. (Only EX- and H-model).